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BULLETIN 802

BIBLIOGRAPHY

OF

NORTH AMERICAN GEOLOGY

FOR

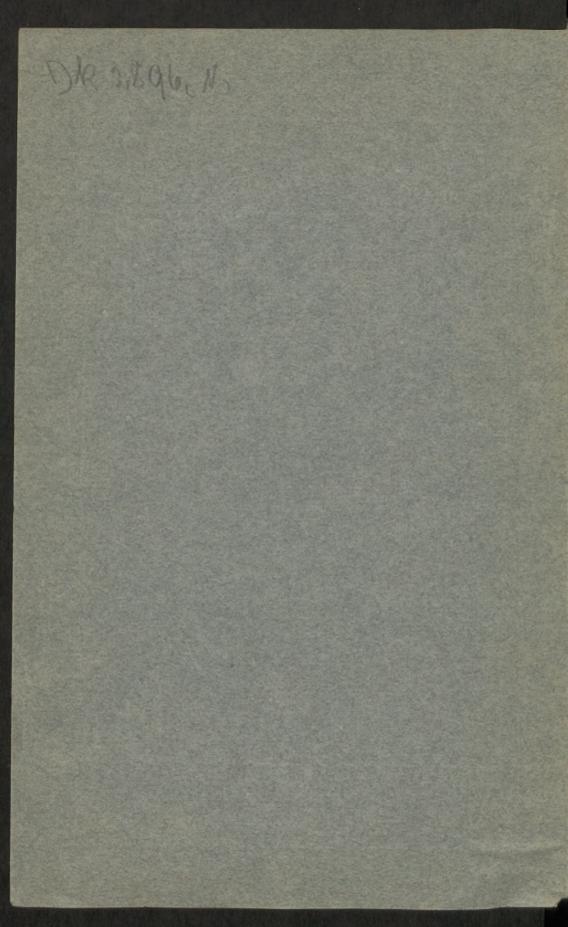
1925 AND 1926

BY

JOHN M. NICKLES



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BIBLIOGRAPHY OF NORTH AMERICAN GEOLOGY FOR 1925 AND 1926

By JOHN M. NICKLES

INTRODUCTION

The bibliography of North American geology, including paleontology, petrology, and mineralogy, for the years 1925 and 1926 contains publications on the geology of the Continent of North America and adjacent islands and on Panama and the Hawaiian Islands. It includes textbooks and papers of general character by American authors, but not those by foreign authors, except papers that appear in American publications.

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By Jone M. Mickes

INTRODUCTION

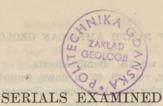
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Academy of Natural Sciences of Philadelphia: Proceedings, vols. 76, 77. Philadelphia, Pa.

Alabama Geological Survey: Bulletin, nos. 28, 31, 32; Special report no. 14. Montgomery, Ala.

Alberta, Scientific and Industrial Research Council: Reports nos. 11, 12, 14, 15, 16. Edmonton, Alberta.

American Academy of Arts and Sciences: Proceedings, vols. 60, 61; Memoirs, vol. 15, nos. 3, 4. Boston, Mass.

American Association of Petroleum Geologists: Bulletin, vols. 9, 10. Tulsa, Okla.

American Institute of Mining and Metallurgical Engineers: Transactions, vols. 71-74. New York.

American Journal of Science, 5th ser., vols. 9-12. New Haven, Conn.

American Mineralogist, vols. 10, 11. Menasha, Wis.

American Museum of Natural History: Bulletin, vols. 47, 51, 52, 55; American Museum Novitates, nos. 156-243. New York.

American Naturalist, vols. 59, 60. New York.

American Philosophical Society: Proceedings, vols. 64, 65; Transactions, new ser., vol. 22, pt. 5. Philadelphia, Pa.

Annales de paléontologie, t. 14, 15. Paris.

Annales des mines, 12th ser., t. 7-10. Paris.

Annals and Magazine of Natural History, 9th ser., vols. 15-18. London.

Appalachia, vol. 16, nos. 2-4. Boston, Mass.

Arizona Bureau of Mines (University of Arizona Bulletin): Bulletin no. 119 (Geol. ser. no. 3). Tucson, Ariz.

Association of American Geographers: Annals, vols. 15, 16. Albany, N. Y.

Bernice Pauahi Bishop Museum: Bulletin, nos. 21, 24, 25, 26, 28, 30, 31, 33. Honolulu, Hawaiian Islands.

Boston Society of Natural History: Proceedings, vol. 38, nos. 1-6; Occasional Papers, vol. 5, pp. 141-222. Boston, Mass.

Botanical Gazette, vols. 79-82. Chicago, Ill.

British Columbia, Bureau of Mines: Annual Report of the Minister of Mines for 1924, 1925. Victoria, British Columbia,

Bulletins of American Paleontology, vol. 10, no. 42; vol. 11, nos. 43-47. Ithaca, N. Y.

California Academy of Sciences: Proceedings, vol. 14, nos. 1-20; vol. 15, nos. 1-16; Occasional Papers, 11, 12. San Francisco, Calif.

California State Mining Bureau: Bulletin, nos. 79, 94-97. San Francisco, Calif. California, University of, Department of Geology: Bulletin, vol. 15, nos. 5-11; vol. 16, nos. 1-7. Berkeley, Calif.

California, University of; Publications in Geography, vol. 2, nos. 2-5. Berkeley, Calif.

California, University of, Seismographic Stations: Bulletin, vol. 2, nos. 5-9, Berkeley, Calif.

Canada, Geological Survey: Summary report for 1924, 1925; Memoirs, nos. 143, 144, 146-152; Economic Geology Series, nos. 1-4; Bulletin, nos. 39, 40, 43-45. Ottawa, Ontario.

Canadian Alpine Journal, vol. 15. Banff, Alberta.

Canadian Field Naturalist, vols. 39, 40. Ottawa, Ontario.

Canadian Institute of Mining and Metallurgy: Transactions, vols. 27, 28; Bulletin, nos. 153-176. Montreal, Quebec.

Canadian Mining Journal, vols. 46, 47. Toronto and Montreal, Canada.

Carnegie Institution of Washington: Yearbook, nos. 24, 25. Washington, D. C. Carnegie Museum: Annals, vol. 16, vol. 17, no. 1; Memoirs, vol. 10, nos. 2-4. Pittsburgh, Pa.

Centralblatt für Mineralogie, etc., 1925, 1926. Stuttgart, Germany.

Coal Age, vols. 27-30. New York.

Colorado College Publications: Science series, vol. 13, no. 2. Colorado Springs,

Colorado Geological Survey: Bulletin, nos. 27, 28, 30, 31. Denver, Colo.

Colorado School of Mines: Quarterly, vols. 20, 21, nos. 2, 3; Magazine, vols. 15, 16. Golden, Colo.

Connecticut Academy of Arts and Sciences: Transactions, vol. 27, vol. 28, pp. 1-78. New Haven, Conn.

Connecticut State Geological and Natural History Survey: Bulletin, nos. 33, 36, 37. Hartford, Conn.

Cuba, Dirección de montes y minas: Boletín de minas, nos. 8-10. Habana, Cuba.

Cushman Laboratory for Foraminiferal Research: Contributions, vol. 1, vol. 2, pts. 1-3. Sharon, Mass.

Denison University, Scientific Laboratories: Bulletin, vol. 21. Granville, Ohio. Economic Geography, vols. 1, 2. Worcester, Mass.

Economic Geology, vols. 20, 21. Lancaster, Pa.

Elisha Mitchell Scientific Society: Journal, vol. 41, 42, nos. 1-2. Chapel Hill, N. C.

Engineering and Mining Journal-Press, vols. 119-122. New York.

Engineers and Engineering, vols. 42, 43. Philadelphia, Pa.

Engineers' Society of Western Pennsylvania: Proceedings, vols. 41, 42. Pittsburgh, Pa.

Field Museum of Natural History: Geological series, vol. 4, no. 4. Chicago, Ill. Florida State Geological Survey: Annual Report, Sixteenth, Seventeenth. Tallahassee, Fla.

Franklin Institute: Journal, vols. 199-202. Philadelphia, Pa.

Geographical Journal, vols. 65-68. London.

Geographical Review, vols. 15, 16. New York.

Geographical Society of Philadelphia: Bulletin, vols. 23, 24. Philadelphia, Pa. Geological Magazine, vols. 62, 63. London.

Geological Society of America: Bulletin, vols. 36, 37. New York.

Geological Society of London: Abstracts of Proceedings, nos. 1123-1154; Quarterly Journal, vols. 81, 82. London.

Geologists' Association of London: Proceedings, vols. 36, 37. London.

Georgia Geological Survey: Bulletin, nos. 23, 42. Atlanta, Ga.

Harvard College, Museum of Comparative Zoology: Bulletin, vol. 57, nos. 7, 8, vol. 66, pt. 2, vol. 67, nos. 1-14; Memoirs, vol. 47, no. 5, vol. 49. Cambridge, Mass.

Hawaiian Volcano Observatory: Bulletin, vol. 13, vol. 14, nos. 1-4. Honolulu, Hawaiian Islands.

Idaho, Bureau of Mines and Geology: Bulletin, nos. 10, 11; Pamphlet [mimeographed], nos. 13-17, 20. Moscow, Idaho.

Illinois State Academy of Science: Transactions, vols. 17-19. Springfield, Ill.

Illinois State Geological Survey: Bulletin, nos. 46-52; Cooperative Mining Series, Bulletin nos. 28-30; Press Bulletin Series, nos. 1-6; Report of Investigations, nos. 2-9, 11. Urbana, Ill.

Indiana, Department of Conservation, Division of Geology: Publication no. 55.
Indianapolis, Ind.

Indiana Academy of Science: Proceedings, vols. 34, 35. Indianapolis, Ind.

Institution of Mining and Metallurgy: Bulletin, nos. 244-267. London.

Institution of Mining Engineers: Transactions, vols. 69-72. Newcastle upon Tyne, England.

Institution of Petroleum Technologists: Journal, vols. 11, 12, nos. 48-59. London.

Icwa Academy of Sciences: Proceedings, vols. 31, 32. Des Moines, Iowa.

Iowa Geological Survey: Vols. 30, 31 (Annual reports, 1921-2, 1923-4.) Des Moines, Iowa.

Johns Hopkins University: Studies in Geology, nos. 6, 7. Baltimore, Md.

Journal of Geography, vols. 24, 25. Chicago, Ill.

Journal of Geology, vols. 31, 32. Chicago, Ill.

Kansas State Geological Survey: Bulletins 10, 11. Lawrence, Kans.

Kansas University: Science Bulletin, vols. 15, 16. Lawrence, Kans.

Kentucky Geological Survey, Ser. 6, vols. 12, 19, 21, 27; Pamphlets 5-8, 11. Frankfort, Ky.

Lake Superior Mining Institute: Proceedings, vols. 24, 25. Ishpeming, Mich. Louisiana, Department of Conservation: Bulletin no. 12. New Orleans, La.

Maryland Geological Survey: Kent County; Queen Anne's County; Talbot County. Baltimore, Md.

Mazama, vol. 6, no. 4, vol. 7, no. 2. Portland, Oreg.

Meddelelser om Groenland, Bd. 54, 58, 59, 68; Oversigt 1876–1826. Copenhagen, Denmark.

Mexico, Instituto geológico: Anales, t. 2, nos. 1-5; Boletín; nos. 43, 45. Mexico City, D. F.

Michigan Academy of Science: Papers, vol. 4, pts. 1, 2. New York.

Michigan Geological and Biological Survey: Publication 36 (Geological series 30). Lansing, Mich.

Michigan, University of, Museum of Geology: Contributions, vol. 2, nos. 4-8, vol. 3. Ann Arbor, Mich.

Mining and Metallurgical Society of America: Bulletin, vols. 18, 19, nos. 173–186.

New York.

Mining and Metallurgy (American Institute of Mining and Metallurgical Engineers), vols. 6, 7. New York.

Mining Congress Journal, vols. 11, 12. Washington, D. C.

Mining Magazine, vols. 32-35. London.

Minnesota Geological Survey: Bulletin, nos. 19-21. Minneapolis, Minn.

Mississippi State Geological Survey: Bulletin, no. 20. Jackson, Miss.

Missouri Bureau of Geology and Mines: Biennial Report [1923-24]; 2d ser., vol. 19. Jefferson City, Mo.

National Academy of Sciences: Proceedings, vols. 11, 12; Memoirs, vol. 19, first memoir. Washington, D. C.

National Geographic Magazine, vols. 47-50. Washington, D. C.

Natural History; the Journal of the American Museum of Natural History, vols. 25, 26. New York.

Nature, vols. 115-118. London.

Nautilus, vol. 38, nos. 3, 4, vol. 39, vol. 40, nos. 1, 2. Boston, Mass.

Nebraska Geological Survey: vol. 8. Lincoln, Nebr.

Nebraska State Museum: Volume 1, Bulletin, nos. 1-12. Lincoln, Nebr.

Neues Jahrbuch für Mineralogie, etc., 1925, 1926; Beilage-Band 52-55. Stuttgart, Germany.

New Jersey Geological Survey: Bulletin 26, 27. Trenton, N. J.

New York Academy of Sciences: Annals, vol. 29, pp. 285-319. New York.

New York State Museum: Bulletin, nos. 258–263, 265, 267, 269–272. Albany, N. Y.

North Carolina Geological and Economic Survey: Biennial report, 1923-4; Bulletin, nos. 29, 31, 34; Economic Paper, nos. 55-57; Circular, nos. 11, 14. Raleigh, N. C.

North Dakota Geological Survey: Bulletin no. 4. Grand Forks, N. Dak.

Ohio Academy of Science: Proceedings, vol. 7, pt. 10, vol. 8, pt. 1. Columbus, Ohio.

Ohio Geological Survey: Fourth series, Bulletin 29, 30. Columbus, Ohio.

Ohio Journal of Science, vols. 25, 26. Columbus, Ohio.

Ontario Department of Mines: Report, vols. 33, 34, 35, pt. 4. Toronto, Ontario. Palaeontologische Zeitschrift, Bd. 7, 8 H. 1-3. Berlin, Germany.

Pan-American Geologist, vols. 43-46. Des Moines, Iowa.

Pennsylvania, Topographic and Geologic Survey: Fourth series, Bulletin C 1, M 6 pt. 4, 7, 8; Atlas, nos. 37, 65, 178, 206. Harrisburg, Pa.

Pennsylvania Academy of Science: Proceedings, vol. 1. Harrisburg, Pa.

Quebec, Mines Branch: Report on mining operations, 1924, 1925. Quebec, Canada.

Rochester Academy of Science: Proceedings, vol. 6, nos. 6, 7. Rochester, N. Y. Royal Society of Canada: Proceedings and Transactions, Third series, vols. 19, 20. Ottawa, Ontario.

San Diego Society of Natural History: Transactions, vol. 4. San Diego, Calif. Science, new ser., vols. 61–64. New York.

Scientific Monthly, vols. 20-23. New York.

Seismological Society of America: Bulletin, vols. 15, 16. Stanford University, Calif.

Sierra Club Bulletin, vol. 12, nos. 2, 3. San Franciso, Calif.

Smithsonia Institution: Annual Report, 1923, 1924, 1925; Smithsonian Miscellaneous Collections, vol. 73, nos. 3, 4, vol. 75, no. 3, vol. 77, nos. 2, 4-11, vol. 78, nos. 1-6. Washington, D. C.

Sociedad científica "Antonio Alzate": Mem. y Rev., t. 44, 45, 46, nos. 1–6. Mexico, D. F.

Société de géographie de Québec: Bulletin, vols, 19, 20. Quebec, Canada.

South Dakota Geological Survey: Biennial Report, 1922-4; Circular 18, 20-28. Vermilion, S. Dak.

South Dakota School of Mines: Bulletin, no. 14. Rapid City, S. Dak.

Southern California Academy of Sciences: Bulletin, vols. 24, 25. Los Angeles, Calif.

Staten Island Institute of Arts and Sciences: Proceedings, vol. 3. Staten Island, N. Y.

Tennessee Academy of Science: Journal, vol. 1. Nashville, Tenn.

Tennessee State Geological Survey: Bulletin, nos. 33–36. Nashville, Tenn. Texas, University: Bulletin, nos. 2509, 2539, 2544, 2607, 2609, 2612, 2644, 2645. Austin, Tex.

Toronto, University: Studies, Geological series, nos. 19-22. Toronto, Ontario. Torrey Botanical Club: Bulletin, vols. 52, 53. Lancaster, Pa.

Torreya, vols. 25, 26. Lancaster, Pa.

Tschermaks Mineralogische und petrographische Mitteilungen, Bd. 36, H. 5–6. Wien, Austria.

United States Bureau of Mines: Bulletin, nos. 197, 222, 224, 226, 230, 231, 233-237, 239-243, 247-258, 262-264, 275; Technical Paper, nos. 320, 330, 335, 341, 343, 345-347, 355-357, 360-363, 365-370, 372-377, 379, 380, 382, 383, 385, 387-390, 392-400, 402, 406, 408. Washington, D. C.

United States Geological Survey: Annual Report, 46th, 47th; Professional Papers 132, 136–140, 142, 143, 145, 146, 147; Bulletins 750, 751, 757, 759, 760, 763, 767–769, 771–774, 776–783, 785, 786–A, 788–A–D, 790–A; Water-Supply Papers 499, 509, 520, 522, 523, 526, 529, 530, 531, 533, 534, 536, 537, 539, 541–548, 552–556, 558–565, 567, 572, 580–A, B, 592; Geologic Atlas, folios 219, 220. Washington, D. C.

United States National Museum: Bulletin, nos. 100, vol. 2, pt. 4, vol. 6, pt. 1, 131, 138; Proceedings, vols. 66, 67, 68, arts. 11, 12, 17, 24, vol. 69, arts.

2, 18, 23, vol. 70, art. 3. Washington, D. C.

Virginia Geological Survey: Bulletin, nos. 11, 25, 26. Charlottesville, Va.

Washington Academy of Sciences: Journal, vols. 15, 16. Washington, D. C.

Western Society of Engineers: Journal, vols. 30, 31. Chicago, Ill.

West Virginia Geological Survey: Mercer, Monroe, and Summers Counties. Morgantown, W. Va.

Wisconsin Academy of Science, Arts, and Letters: Transactions, vol. 22. Madison, Wis.

Wisconsin Geological and Natural History Survey: 15th Annual Report; Bulletin, nos. 59C, 61D, 67. Madison, Wis.

Wyoming, Geologist's Office: 13th Annual Report; Bulletin, nos. 19, 20. Cheyenne, Wyo.

Zeitschrift für Gletscherkunde, Bd. 12, H. 3-4, 13, 14. Berlin, Germany.

Zeitschrift für praktische Geologie, Jg. 33, 34. Berlin, Germany.

Zeitschrift für Vulkanologie, Bd. 8, H. 4, Bd. 9, 10, H. 1, 2. Berlin, Germany.

BIBLIOGRAPHY

Abbott, C. D.

1. The St. Lawrence earthquake of February 28, 1925: Seismological Soc. America, Bull., vol. 16, no. 2, pp. 133-145, 2 figs., June, 1926.

Abel, Othenio.

- Geschichte und Methode der Rekonstruktion vorzeitlicher Wirbeltiere. vlii, 327 pp., 255 figs., Jena, Gustav Fischer, 1925.
- (and Cook, Harold J.). A preliminary study of early mammals in a new fauna from Colorado: Colorado Mus. Nat. Hist., Proc., vol. 5, no. 4, pp. 33-36, 4 figs., November 2, 1925.
- Amerikafahrt; Eindrücke, Beobachtungen und Studien eines Naturforschers auf einer Reise nach Nordamerika und Westindien [includes various notes on the geology, physiography, and paleontology of the United States and Cuba]. 462 pp., 273 figs., Jena, Gustav Fischer, 1926.

Adams, George Irving.

 Geology of Alabama; The crystalline rocks: Alabama, Geol. Survey, Spec-Rept. no. 14, pp. 25-40, 1 fig., 1 pl., 1926.

Adams, John E.

 Carbonic flora of Butler's Landing [Johnson County, Iowa] (abstract): Pan-Am. Geologist, vol. 46, no. 5, pp. 399-400, December, 1926.

Adams, L. A.

7. The significance of fossil footprints: Illinois State Acad. Sci., Trans., vol. 18, pp. 172-177, 1925.

Adams, Leason H.

- 8. (and Williamson, E. D.). The composition of the earth's interior: Smithsonian Inst., Ann. Rept., 1923, pp. 241-260, 6 figs., 1925.
- (and Gibson, R. E.). The compressibilities of dunite and of basalt glass and their bearing on the composition of the earth: Nat. Acad. Sci., Proc., vol. 12, no. 5, pp. 275–283, May 15, 1926; Die Kompressibilität des Dunits und des basaltischen Glases und ihre Beziehungen zur Zusammensetzung der Erde: Gerlands Beiträge zur Geophysik, Bd. 15, H. 3, pp. 241–250, 1926.

10. The earth's crust and the discontinuity beneath it: Nat. Research Council, Bull., vol. 11, pt. 2, no. 56, pp. 29-30, November, 1926; abstract, Am. Jour. Sci., 5th ser., vol. 12, p. 272, September, 1926.

Addington, Arch R.

 A special case of drainage adjustment near the Illinoian drift margin in southeastern Owen County, Indiana: Indiana Acad. Sci., Proc., vol. 35, pp. 125–130, 5 figs., 1926.

Agar, William M.

 The minerals of the intermediate zone, Butte, Montana: Econ. Geology, vol. 21, no. 7, pp. 695-707, 5 figs., November, 1926.

Aguerrevere, Santiago E. See Schenck, 2253.

Aguilera, E.

 Reseña sobre la industria minera en la provincia de Oriente durante el año 1923 á 1924: Cuba, Dirección de montes y minas, Bol. minas, no. 8, pp. 68-70, August, 1925.

Alcock, Frederick James.

- Copper prospects in Gaspe Peninsula, Quebec: Quebec, Dept. Colonization... Report on Mining Operations... 1924, pp. 29–39, 2 figs., 1925.
- Mount Albert map area, Quebec: Canada, Geol. Survey, Mem. 144, 75 pp., 5 figs., 6 pls., map, 1926.
- Shickshock Mountains, central Gaspe, Quebec: Canada, Geol. Survey,
 Summ. Rept., 1924, pt. C, pp. 127–133, 2 figs., 2 pls., map, 1926.
- 17. Geology of Mount Serpentine, Gaspe, Quebec: Canada, Geol. Survey, Summ. Rept., 1924, pt. C, pp. 134-141, 1 fig., 1926.
- Lead and zinc in eastern Canada: Mining and Metallurgy, vol. 7, no. 230,
 pp. 51–56, 4 figs., February, 1926; Canadian Min. Jour., vol. 47, no. 19, pp. 488–492, May 7, 1926.
- Memorial of William McInnes: Geol. Soc. America, Bull., vol. 37, no. 1, pp. 96-99, 1 pl. (portr.), March 30, 1926.

Alden, William Clinton.

- Pre-Wisconsin glaciation of northern Rocky Mountains (abstract): Pan-Am. Geologist, vol. 43, no. 5, pp. 371-372, June, 1925.
- 21. Glaciation and physiography of Wind River Mountains, Wyoming (abstract): Washington Acad. Sci., Jour., vol. 16, no. 3, p. 73, February 4, 1926.

Alderson, Victor Clifton.

- Colorado oil shale: Colorado School of Mines, Quart., vol. 20, no. 2, 53 pp., illus., April, 1925.
- Jefferisite: Colorado School of Mines, Circular of Information, 4 pp. [n. d., 1925?].
- 24. Oil shale: Inst. Petroleum Technologists, Jour., vol. 12, no. 57, pp. 366-374,
 August, 1926.

Aldrich, Truman Heminway.

25. Notes on the Clinton group in Alabama; Am. Inst. Min. and Met. Eng., Trans., vol. 71, pp. 304–307, 1 fig., 1925; also [preprint], no. 1375, 1924; abstract, Mining and Metallurgy, vol. 5, no. 215, pp. 547–548, November, 1924.

Alexander, W. P.

26. Trips into the geologic past of western New York: Hobbies (Buffalo Soc. Nat. Hist.), vol. 7, no. 2, pp. 3-18, June, 1926.

Allan, John Andrew.

- 27. Geological map of the Province of Alberta: Alberta, Scientific and Industrial Research Council, 1925. Scale, 1 inch=25 miles.
- Geological investigations during 1924: Alberta, Scientific and Industrial Research Council, 5th Ann. Rept. (Rept. no. 12), pp. 32-45, 1925.
- Geology of Alberta coal; Canadian Inst. Min. and Met., Bull., no. 156, pp. 387-405, 10 figs., April, 1925; Trans., vol. 28, pp. 231-251, 10 figs. [1926].
- (and Sanderson, J. O.). An Upper Cretaceous disconformity in Alberta (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 161, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, p. 155, March 1925.

Allan, John Andrew-Continued.

31. [Report of the] Geological survey division: Alberta, Scientific and Industrial Research Council, 6th Ann. Rept., 1925 (Rept. no. 16), pp. 32-46, 1 fig., 1926.

Ice crystal markings: Am. Jour. Sci., 5th ser., vol. 11, pp. 494–500, 10 figs., June, 1926.

33. (and Rutherford, Ralph L.). Paskapoo fossil plant localities of Alberta: Roy. Soc. Canada, Proc. and Trans., 3d ser., vol. 20, pt. 2, sec. 4, pp. 183–186, 1 pl., 1926.

Allen, Eugene Thomas. See also Day, 617; Wright, 2885.

34. Further evidence of the nature of hot springs (abstract): Washington Acad. Sci., Jour., vol. 16, no. 3, p. 74, February 4, 1926.

Allen, Glover Morrill.

 Fossil mammals from South Carolina: Harvard Coll., Mus. Comp. Zoology, Bull., vol. 67, no. 14, pp. 447–467, 5 pls., July, 1926.

Allen, Herman Camp.

36. The chemistry of Kansas coal: Kansas, Univ., Bull., vol. 26, no. 5, Division of Chemical Research, Bull. no. 4, pp. 127–202, 3 figs., March 1, 1925.

Allen, Maxwell W.

37. Some remarks concerning Pacific coast earthquakes: Seismological Soc. America, Bull., vol. 15, no. 2, pp. 128–139, June, 1925.

Alling, Harold Lattimore. See also Kemp, 1356.

38. Genesis of the Adirondack magnetites: Econ. Geology, vol. 20, no. 4, pp. 335–363, June-July, 1925.

The potash-soda feldspars: Jour. Geology, vol. 34, no. 7, pp. 591-611, 5 figs., October-November, 1926.

Allison, Ira S.

 The Giants Range batholith of Minnesota: Jour. Geology, vol. 33, no. 5, pp. 488-508, 5 figs., July-August, 1925.

 Enrichment of the Mesabi iron ores: Econ. Geology, vol. 20, no. 7, pp. 693-697, November, 1925.

42. Weathered granite twice metamorphosed: Jour. Geology, vol. 34, no. 3, pp. 281–285, April-May, 1926.

Allison, Vernon C.

43. Climatic pattern of Cenozoic times: Pan-Am. Geologist, vol. 43, no. 3, pp. 205-216, April, 1925.

Anderson, Abram E.

44. Sand fulgurites from Nebraska, their structure and formative factors: Nebraska State Mus., Bull. 7, vol. 1, pp. 49–86, 21 figs., 1 pl., June, 1925.

Anderson, Alfred L.

45. Mica deposits of Latah County, Idaho: Idaho, Bur. Mines and Geology, Pamph. no. 14, 15 pp., 1 pl. (map) [no date, 1925?]. [Mimeographed.]

Anderson, C. O. See Myers, 1875.

Anderson, Charles A.

46. Voltaite from Jerome, Arizona (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 209, March 30, 1926.

Anderson, Frank Marion.

- 47. (and Hanna, G. Dallas). Fauna and stratigraphic relations of the Tejon Eocene at the type locality in Kern County, California: California Acad. Sci., Occ. Papers 11, 249 pp., 10 figs., 16 pls. (incl. map), March 18, 1925.
- 48. Origin of California petroleum: Geol. Soc. America, Bull., vol. 37, no. 4, pp. 585-614, December 30, 1926.

Anderson, G. E.

- Experiments on the rate of wear of sand grains: Jour. Geology, vol. 34, no. 2, pp. 144-158, February-March, 1926.
- 50. Geology and ore deposits of the Asientos-Tepezala district, Aguascalientes, Mexico: Am. Inst. Min. and Met. Eng., Trans. [preprint], no. 1551, 17 pp., 2 figs., February, 1926; Trans., vol. 74, pp. 238-254, 2 figs., 1926; abstract, Mining and Metallurgy, vol. 7, no. 230, p. 77, February, 1926.

Anderson, J. A.

51. (and Wood, H. O.). Description and theory of the torsion seismometer:

Seismological Soc. America, Bull., vol. 15, no. 1, pp. 1-72, 4 flgs.,
4 pls., March, 1925.

Anderson, J. C. See Lindgren, 1588.

Anderson, Robert. See Takahashi, 2498.

Andrews, Ernest Clayton.

- 52. The romance of the unknown in the preparation of geological reports: Econ. Geology, vol. 20, no. 2, pp. 189-194, March-April, 1925.
- 53. Structural unity of the Pacific region; evidence of the ore deposits: Econ. Geology, vol. 20, no. 8, pp. 707-722, December, 1925.
- 54. Igneous intrusions and ore deposits of the "zone of rock flowage"; Econ. Geology, vol. 21, no. 1, pp. 81-89, January-February, 1926.
- 55. Hypothesis of mountain building: Geol. Soc. America, Bull., vol. 37, no. 3, pp. 439–454, September 30, 1926; abstract, no. 1, pp. 163–164, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, pp. 162–163, March, 1926.

Anrep, Aleph.

 Investigation of peat bogs in Nova Scotia: Canada, Geol. Survey, Summ. Rept., 1924, pt. C, pp. 218–239, 12 figs., 1926.

Antevs, Ernst. See also Twenhofel, 2603.

- Retreat of the last ice sheet in eastern Canada: Canada, Geol. Survey, Mem. 146, 142 pp., 37 figs., 9 pls., 1925.
- 58. On the Pleistocene history of the Great Basin: Carnegie Inst. Washington, Pub. no. 352 (Quaternary climates), pp. 51-114, 19 figs., 3 pls., July, 1925.
- 59. The climatologic significance of annual rings in fossil woods: Am. Jour. Sci., 5th ser., vol. 9, pp. 296–302, April, 1925.
- Glacial climatic conditions (abstract): Sci. Monthly, vol. 20, no. 5, pp. 464-465, May, 1925; Pan-Am. Geologist, vol. 43, no. 5, pp. 379-380, June, 1925.
- 61. Probable correlation between the last ice retreat in North America and in Europe (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, pp. 153–154, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, pp. 147–148, March, 1925.

Antevs, Ernst-Continued.

Pleistocene pre-Wisconsin beds in Vermont (abstract); Geol. Soc. America, Bull., vol. 36, no. 1, pp. 154-155, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, pp. 150-151, March, 1925.

 Conditions of formation of the varved glacial clay (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, pp. 171-172, March 30, 1925.

64. Big tree as a climatic measure (abstract): Pan-Am. Geologist, vol. 44, no. 1, pp. 74-76, August, 1925.

65. Late Quaternary changes of level in southern New England (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, pp. 181–182, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, p. 170, March, 1926.

Appleford, William L. See Macelwane, 1664, 1666.

Applin, Esther Richards. See also Cushman, 574.

66. (and Ellisor, Alva E., and Kniker, Hedwig T.) Subsurface stratigraphy of the Coastal Plain of Texas and Louisiana: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 1, pp. 79–122, 1 fig., 1 pl., January–February, 1925.

Applin, Paul L.

67. The Stratton Ridge salt dome, Brazoria County, Texas: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 1, pp. 1-34, 6 figs., January-February, 1925; Geology of salt dome oil fields, pp. 644-677, 6 figs.; 1926.

Ashley, George Hall. See also Miller, 1789; White, 3001.

68. Geology and mineral resources of the Punxsutawney quadrangle, Pennsylvania: Pennsylvania Geol. Survey, Topog. and Geol. Atlas, no. 65, Punxsutawney quadrangle, 145 pp., 26 figs., 6 pls. (maps and sections), 1926.

 Memorial of Richard R. Hice: Geol. Soc. America, Bull., vol. 37, no. 1, pp. 94-96, 1 pl. (portr.), March 30, 1926.

70. The Pittsburgh coal bed of Pennsylvania: Am. Inst. Min. and Met. Eng., Trans., [preprint], no. 1602, 6 pp., 2 figs. (incl. map), October, 1926.

Ashmead, Dever C.

Anthracite losses and reserves in Pennsylvania: Pennsylvania Geol. Survey, 4th ser., Bull. M8, 71 pp., 13 figs., 1 pl. (map), 1926.

Athy, L. F. See Ekblaw, 717.

Atwood, Alice C.

72. Peat; a contribution towards a bibliography of the American literature through 1925: U. S., Dept. Agr., Library, Bibliographical Contributions, no. 12, 95 pp., September, 1926. [Mimeographed.]

Atwood, Rollin Salisbury. See Atwood, 73.

Atwood, Wallace Richards. See Atwood, 74, 75.

Atwood, Wallace Walter.

73. (and Atwood, Rollin Salisbury). Physiographic stages in the evolution of the San Juan Mountain region and their correlation with the physiography of the Front Ranges of Colorado (abstract): Assoc. Am. Geographers, Annals, vol. 15, no. 1, p. 31, March, 1925.

74. (and Atwood, Wallace R.). Ancient tillite near Gunnison, Colorado (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 168, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, p. 159, March, 1925.

86012-28-2

Atwood, Wallace Walter-Continued.

75. (and Atwood, Wallace R.). Gunnison tillite of Eocene age [Colorado]:

Jour. Geology, vol. 34, no. 7, pp. 612-622, 10 figs., October-November,
1926.

Aurin, F. L.

 (and Officer, H. G., and Gould, Charles N.). The subdivision of the Enid formation: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 8, pp. 786-799, 1 fig., August, 1926.

Babcock, Earle Jay. See also Leonard, 1567.

77. North Dakota coals and clays as factors in industrial development: North Dakota, Univ., College of Engineering, 34 pp., 1 fig., 20 pls. [1925?].

Baddley, Elmer R. See Blackwelder, 226.

Bailey, Joseph Whitman.

 Loring Woart Bailey; the story of a man of science, 141 pp., illus., Saint John, N. B., J. & A. McMillan, 1925.

Bailey, Thomas L.

79. The Gueydan, a new middle Tertiary formation from the southwestern Coastal Plain of Texas: Texas, Univ., Bull., no. 2645, 187 pp., 3 figs., 12 pls. (incl. map), December 1, 1926.

Bailey, Willard F.

80. Carbonic invertebrates from a Triassic conglomerate in Arizona (abstract): Pan-Am. Geologist, vol. 45, no. 3, p. 251, April, 1926.

Bain, George W. See also Bruce, 313.

 Diffusion in Agate Point vitrophyres [Lake Superior, Ontario]: Am. Jour. Sci., 5th ser., vol. 11, pp. 74–88, 7 figs., January, 1926.

82. Agate Point rocks [Lake Superior, Ontario]: Am. Jour. Sci., 5th ser., vol. 11, p. 364, April, 1926.

 Amount of assimilation by the Sudbury norite sheet: Jour. Geology, vol. 33, no. 5, pp. 509–525, 4 figs., pp. 509–525, 4 figs., July-August, 1925.

84. Pre-Keewatin sediments of the upper Harricana Basin, Quebec: Jour. Geology, vol. 33, no. 7, pp. 728-743, 10 figs. (incl. map), October-November, 1925.

Skeleton quartz crystals: Am. Mineralogist, vol. 10, no. 12, pp. 435-441,
 7 figs., December, 1925.

 Barraute area, Abitibi County, Quebec: Canada, Geol. Survey, Summ. Rept., 1924, pt. C, p. 126, map, 1926.

87. Resorption as an agent in freeing hematite from the Grenville granite magma: Canadian Inst. Min. and Met., Bull., no. 167, pp. 379-392, 7 figs., March, 1926.

 Representation of three dimensional space: Canadian Min. Jour., vol. 47, no. 16, pp. 417–425, 13 figs., April 16, 1926.

Localization of mineral deposits of northern Ontario and Quebec: Canadian Min. Jour., vol. 47, no. 17, pp. 440-443, 3 figs., April 23, 1926.

 Evidence of assimilation and assimilation processes: Jour. Geology, vol. 34, no. 7, pp. 657–670, 2 figs., October–November, 1926.

91. Tectonics of original Huronian of Webbwood, Ontario: Pan-Am. Geologist, vol. 44, no. 2, pp. 95–120, 1 fig., 5 pls., September, 1925.

 Source of original Huronian sediments: Pan-Am. Geologist, vol. 44, no. 3, pp. 187–198, 2 pls., October, 1925. Bain, George W .- Continued.

93. Is the Huronic Gowganda conglomerate of glacial origin?: Pan-Am. Geologist, vol. 44, no. 5, pp. 369-386, 1 fig., 1 pl., December, 1925.

 Killarneyan intrusives of Sudbury [Ontario]: Pan-Am. Geologist, vol. 45, no. 2, pp. 109-124, 1 pl. (map), March, 1926.

 Chemistry of Killarneyan magma of Sudbury: Pan-Am. Geologist, vol. 45, no. 4, pp. 277-294, 4 pls., May, 1926.

96. Physiographic development of Canadian shield: Pan-Am. Geologist, vol. 46, no. 1, pp. 53–62, 2 pis., August, pp. 363–374, 2 pls., December, 1926.

97. Physiographic development of Canadian shield: Pan-Am. Geologist, vol. 47, no. 1, pp. 15–28, 1 fig., 2 pls., February, 1927. Geology and problems of the Webbwood area, Canada, Thesis, Columbia University, 1927. Contributions from the department of geology of Columbia University, vol. 36, no. 3. Consists of titles

Baker, Frank Collins.

98. Bowmanville low-water stage of glacial Lake Chicago: Science, new ser., vol. 64, p. 249, September 10, 1926.

nos. 91-97, reprints bound together.

Baker, Manley Benson.

99. Metallogenesis and the pre-Cambrian of Canada (abstract): British Assoc. Adv. Sci., Rept., 92d Meeting, p. 382, 1925.

Baker, W. F. See Wallace, 2715.

Baker, W. G.

100. A light-colored zone of subsoil in southern Iowa: Iowa Acad. Sci., Proc., vol. 31, pp. 347-349, 2 figs. [1926?].

Balk, Robert.

101. Primary structure of granite massives (with discussion by J. F. Kemp): Geol. Soc. America, Bull., vol. 36, no. 4, pp. 679-696, 7 figs., December 30, 1925; abstract, no. 1, p. 169, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, p. 159, March, 1925.

102. Structure of the Cortlandt norite, New York (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 146, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 1, p. 94, February, 1926.

103. Report on the field work done for the New York State Geological Survey in geological mapping of the Newcomb quadrangle, Essex County, N. Y.: New York State Mus. Bull. 267, pp. 30-31, 1926.

Ball, A. H. See Cockfield, 475.

Ball, John R. See Flint, 810.

Ball, Max Waite.

104. Waters from the Green River shale: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 1, p. 171, January-February, 1925.

Balliet, Letson.

105. A study in oil deposits: Oil Age, vol. 20, no. 4, pp. 10, 12, October, 1923.

106. The genesis of petroleum: Oil Age, vol. 20, no. 5, pp. 10, 12, 49-50, 5

figs., November: no. 6, pp. 10-12, 54, 3 figs., December, 1923.

figs., November; no. 6, pp. 10-12, 54, 3 figs., December, 1923; vol. 21, no. 1, pp. 10-11, January; no. 2, pp. 11, 26, February; no. 3, pp. 9-10, 31, March; no. 4, pp. 18, 20, 48, April; no. 5, pp. 16, 18, 34-35, 3 figs., May, 1924.

107. Restoration of the oldest known forest [middle Devonian, Gilboa, New York]: Science, new ser., vol. 61, pp. 507-508, May 15, 1925.

*Barbour, Erwin Hinckley. See also Matthew, 1732.

108. Elephas scotti, a new primitive mammoth from Nebraska: Nebraska State Mus., Bull. 2, vol. 1, pp. 21-24, 5 figs., April, 1925.

109. Prosthennops xiphodonticus, sp. nov., a new fossil peccary from Nebraska: Nebraska State Mus., Bull. 3, vol. 1, pp. 25-31, 2 figs., April, 1925.

Notes on Nebraska fulgurites: Nebraska State Mus., Bull. 6, vol. 1, pp. 45–48, 2 figs., June, 1925.

111. Hackberry conglomerate, a new Nebraska rock: Nebraska State Mus., Bull. 8, vol. 1, pp. 87-90, 5 figs., August, 1925.

112. Tetrabelodon abeli, sp. nov.: Nebraska State Mus., Bull. 9, vol. 1, pp. 91-94, 6 figs., August, 1925.

113. Skeletal parts of the Columbian mammoth *Elephas maibeni*, sp. nov. [Archidiskodon maibeni]: Nebraska State Mus., Bull. 10, vol. 1, pp. 95-118, 30 figs., August, 1925.

114. Archidiskodon maibeni: Nebraska State Mus., Bull. 11, vol. 1, pp. 119-122, 1 fig., June, 1926.

Barrell, Joseph.

115. The nature and environment of the Lower Cambrian sediments of the southern Appalachians: Am. Jour. Sci., 5th ser., vol. 9, pp. 1-20, 2 figs., January, 1925.

 Marine and terrestrial conglomerates: Geol. Soc. America, Bull., vol. 36, no. 2, pp. 279-341, 6 figs., June 30, 1925.

117. Geological relations of earth condensation and resulting acceleration in rotation: Am. Jour. Sci., 5th ser., vol. 10, pp. 408-432, 499-529, November and December, 1925; vol. 11, pp. 27-41, 11 figs., January, 1926.

Barrett, S. A.

118. Field studies for the catlinite and quartzite groups: Milwaukee, Public Mus., Year Book, 1924, vol. 4, pp. 7-20, 13 figs., October 9, 1926.

Barringer, Daniel Moreau.

119. Exploration at Meteor Crater [Arizona]: Eng. and Min. Jour.-Press, vol. 121, no. 2, p. 59, January 9; no. 11, pp. 450-451, March 13; no. 19, p. 771, May 8, 1926.

Bartle, Glenn G.

120. Plant life as possible source of petroleum deposits: Oil Weekly, vol. 38, no. 5, pp. 46, 48, July 24, 1925.

Bartlett, Albert B.

121. The mineral hot springs of Wyoming: Wyoming, Geologist's Office, Bull. no. 16 [in error for 19], 15 pp., 5 figs., May 6, 1926.

122. Atlantic City-South Pass gold mining district: Wyoming, Geologist's Office, Bull. no. 20, 23 pp., 2 figs., July 15, 1926.

123. Thirteenth biennial report of the State geologist [of Wyoming] for the period October 1, 1924, to September 30, 1926. 29 pp., 1 pl., tables, Cheyenne, Wyoming [1926].

Barton, Donald C.

124. The salt domes of south Texas: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 3, pp. 536-589, 10 figs., May-June, 1925; Geology of salt dome oil fields, pp. 718-771, 10 figs., 1926.

125. (and Paxson, Roland B.). The Spindletop salt dome and oil field, Jefferson County, Texas: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 3, pp. 594-612, 5 figs., May-June, 1925; Geology of salt dome oil fields, pp. 478-496, 5 figs., 1926.

126. Geophysical methods in the Gulf Coastal Plain: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 3, pp. 669-671, May-June, 1925.

- 127. Pine Prairie salt dome [Evangeline Parish, Louisiana]: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 4, pp. 738-755, 5 figs., July, 1925: Geology of salt dome oil fields, pp. 419-436, 5 figs., 1926.
- 128. Salt-dome sulphur deposits of Texas Gulf coast: Pan-Am. Geologist, vol. 44, no. 1, pp. 59-60, August, 1928.
- 129. The American salt-dome problems in the light of the Rumanian and German salt domes: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 9, pp. 1227-1268, 13 figs., 2 pls., December, 1925; Geology of salt dome oil fields, pp. 167-208, 13 figs., 2 pls., 1926.

130. (and Mason, S. L.). Further note on barite pisolites from the Batson and Saratoga oil fields: Am. Assoc. Petroleum Geologists, Bull.,

vol. 9, no. 9, pp. 1294-1295, December, 1925.

131. Notes on "paraffin dirt": Min. Mag., vol. 33, no. 6, pp. 343-347, December, 1925.

132. (and Goodrich, R. H.). The Jennings oil field, Acadia Parish, Louisiana: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 1, pp. 72-92, 6 figs., 1 pl., January, 1926; Geology of salt dome oil fields, pp. 398-418, 6 figs., 1 pl., 1926.

Bartram, John G.

133. Occurrence of black oil in Wyoming: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 4, pp. 443-448, 1 fig., April, 1926.

Bass, Nathan W. See also Rubey, 2183.

134. Geologic structure of the Dakota sandstone in western Kansas: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 6, pp. 1019-1023, 2 figs., September, 1925.

135. Geologic investigations in western Kansas, with special reference to oil and gas possibilities; Geology of Ellis County; Geology of Hamilton County; Geologic structure of the Dakota sandstone; Structure and limits of the Kansas salt beds; Kansas, State Geol. Survey, Bull. 11, 95 pp., 27 figs., 9 pls. (incl. maps) [1926].

Bassett, Charles Fernando.

136. The Devonian strata of the Alto Pass quadrangle: Illinois State Acad. Sci., Trans., vol. 18, pp. 360-368, 2 figs., 1 pl., 1925.

Bassler, Ray Smith. See also Canu, 400; Ulrich, 2621; Wade, 2685.

137. Proceedings of the sixteenth annual meeting of the Paleontological Society, held at Ithaca, New York, December 29-31, 1924: Geol. Soc. America, Bull., vol. 36, no. 1, pp. 211-240, March 30, 1925.

138. Classification and stratigraphic use of conodonts (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, pp. 218-220, March 30, 1925.

Bassler, Ray Smith-Continued.

- Early Mississippian rocks of northern Tennessee (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 221, March 30, 1925.
- 140. The stratigraphic use of conodonts (abstract): Washington Acad. Sci., Jour., vol. 16, no. 3, pp. 72-73, February 4, 1926.
- 141. Proceedings of the seventeenth annual meeting of the Paleontological Society, held at New Haven, Connecticut, December 28–30, 1925: Geol. Soc. America, Bull., vol. 37, no. 1, pp. 225–254, March 30, 1926.
- 142. Structural contouring in areas of unconformable formations with variable thicknesses (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 242, March 30, 1926.

Bastin, Edson Sunderland.

- 143. Primary native silver ores of South Lorraine and Cobalt, Ontario: Econ. Geology, vol. 20, no. 1, pp. 1-24, 5 figs., 7 pls., January-February, 1925.
- 144. (and others). The presence of sulphate reducing bacteria in oil field waters: Science, new ser., vol. 63, pp. 21-24, January 1, 1926.
 - 145. A hypothesis of bacterial influence in the genesis of certain sulphide ores: Jour. Geology, vol. 34, no. 8, pp. 773-792, 3 figs., November— December, 1926.
- 146. The problem of the natural reduction of sulphates: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 12, pp. 1270–1299, 8 figs., December, 1926; abstract, Geol. Soc. America, Bull., vol. 37, no. 1, pp. 146–147, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 1, pp. 94–95, February, 1926.

Bateman, Alan Mara. See also Lindgren, 1588.

147. Notes on silver-lead deposits of Slocan district, British Columbia, Canada: Econ. Geology, vol. 20, no. 6, pp. 554-572, September-October, 1925.

Bateman, G. C.

148. Alfred Granville Burrows: Eng. and Min. Jour.-Press, vol. 120, no. 13, p. 484, portr., September 26, 1925.

Bather, Francis Arthur.

149. The habits of some North American cystids (abstract): British Assoc. Adv. Sci., Rept. 92d Meeting, p. 381, 1925.

Bauer, Clyde Max.

- 150. Lake Basin oil field [Stillwater County, Montana]: Mining and Metallurgy, vol. 6, no. 217, pp. 22-24, January, 1925.
- 151. Quartzite pebbles at the base of the Lance formation in Montana: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 2, pp. 344-346, March-April. 1925.
- 152. Oil and gas fields of the Texas Panhandle: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 8, pp. 733-746, 1 fig., 1 pl. (map), August, 1926.

Bauer, L. H.

153. (and Palache, C.). Hyalophane from Franklin Furnace, New Jersey Am. Mineralogist, vol. 11, no. 7, pp. 172-174, July, 1926.

Bayley, William Shirley.

154. The kaolins of North Carolina: North Carolina Geol. and Econ. Survey, Bull. no. 29, 132 pp., 14 figs., 2 pls. (incl. map), 1925.

155. Deposits of brown iron ores (brown hematite) in western North Carolina: North Carolina Geol. and Econ. Survey, Bull. no. 31, 76 pp., 11 figs., 9 pls. (incl. map), 1925.

Bean, Ernest F. See also Hotchkiss, 1177.

156: Report of the director of the survey: Wisconsin, Geol. and Nat. Hist. Survey, 15th Bienn. Rept., 44 pp., 1 fig., 1926.

Beckstrom, R. C. See Van Tuyl, 2649.

Beckwith, Radcliffe H.

157. Geological setting of Idaho batholith: Pan-Am. Geologist, vol. 45, no. 5, pp. 359-376, 3 pls. (incl. map), June, 1926.

158. Quartz veins of the Buffalo Hump [mining district, Idaho]: Pan-Am Geologist, vol. 46, no. 2, pp. 111-120, 1 fig., September, 1926.

Beede, Joshua William.

159. (and Kniker, Hedwig T.). Species of the genus Schwagerina and their stratigraphic significance: Texas, Univ., Bull., no. 2433, 96 pp., 9 pls., map [1925?].

160. (and Christner, D. D.). The San Angelo formation: Texas, Univ., Bull., no. 2607, pp. 5-17, map, June, 1926.

161. (and Christner, D. D.). The geology of Foard County: Texas, Univ., Bull., no. 2607, pp. 18-53, 5 figs., map, June, 1926.

Beeson, J. J.

162. Mining districts and their relation to structural geology: Am. Inst. Min. and Met. Eng., Trans. [preprint], no. 1500, 36 pp., 9 figs., September, 1925; discussion by Charles Keyes and Charles A. Porter, no. 1512, pp. 4-10, 2 figs., December, 1925; abstract, Mining and Metallurgy, vol. 6, no. 224, p. 438, August, 1925.

Behre, Charles H., jr. See also Miller, 1789.

163. A new field for the geologist (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, pp. 147–148, March 30, 1925: Pan-Am. Geologist, vol. 43, no. 2, p. 147, March, 1925.

164. Taconic folding in the Martinsburg shales (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, pp. 157–158, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, pp. 152–153, March, 1925.

165. Observations on structures in the slates of Northampton County, Pennsylvania: Jour. Geology, vol. 34, no. 6, pp. 481–506, 19 figs., August-September, 1926.

Bell, Alfred H.

166. Oil prospects in central Pike County: Illinois State Geol. Survey, Press Bull. Ser., Illinois Petroleum, no. 3, pp. 7–10, 1 fig., July 24, 1926.

167. Oil investigations in the Centralia area; preliminary report; Illinois State Geol. Survey, Press Bull. Ser., Illinois Petroleum, no. 4, pp. 6-12, 2 figs., August 28, 1926.

168. Oil investigations in the Centralia area: Illinois State Geol. Survey,
Press Bull. Ser., Illinois Petroleum, no. 5, pp. 1-10, October 16, 1926.

Bell, Alfred H .-- Continued.

- 169. Oil possibilities of the Ayers anticline [Bond County]: Illinois State Geol. Survey, Press Bull. Ser., Illinois Petroleum, no. 5, pp. 15–18, 1 fig., October 16, 1926.
- 170. The Sorento dome: Illinois State Geol. Survey, Press Bull. Ser., Illinois Petroleum, no. 6, 11 pp., 3 figs., December 4, 1926.

Bell, James Mackintosh.

- 171. (and Thompson, Ellis). The effect of deep-seated alterations upon the mineralogical and geological features of the Keeley mine [South Lorrain district, Ontario] (abstract): British Assoc. Adv. Sci., Rept. 92d Meeting, pp. 382-383, 1925.
- 172. (and O'Heir, H. B.). Structural control of the location of ore deposits, with especial reference to Cobalt, South Lorrain, and Porcupine: Roy. Soc. Canada, Proc. and Trans., 3d ser., vol. 20, pt. 2, sec. 4, pp. 227-236, 3 pls., 1926.

Bell, Walter Andrew.

- 173. The New Glasgow conglomerate member of Pictou County, Nova Scotia:
 Canadian Inst. Min. and Met., Bull., no. 158, pp. 605–634, 1 fig.,
 June, 1925; Trans., vol. 28, pp. 447–476, 3 figs. [1926]; discussion,
 vol. 29, pp. 498–499 [1927]. In part, Canadian Min. Jour., vol. 47,
 no. 28, p. 694, July 9, 1926.
- 174. Carboniferous formations of Northumberland Strait, Nova Scotia: Canada, Geol. Survey, Summ. Rept., 1924, pt. C, pp. 142–180, 3 figs., 4 pls., 1926.
 - 175. Minto coal basin, New Brunswick; paleontology and correlation: Canada, Geol. Survey, Mem. 151, pp. 18-19, 1926.

Belt, Ben C.

- 176. Chapeño salt dome, Tamaulipas, Mexico: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 1, pp. 134-135, January-February, 1925; Geology of salt dome oil fields, pp. 772-773, 1926.
- 177. Stratigraphy of the Tampico district of Mexico: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 1, pp. 136-144, January-February, 1925.

Benedict, P. C. See Fearing, 777.

Bengtson, Nels A.

178. Notes on the physiography of Honduras: Geog. Rev., vol. 16, no. 3, pp. 403-413, 8 figs., July, 1926.

Benson, William Noel.

179. The tectonic conditions accompanying the intrusion of basic and ultrabasic igneous rocks: Nat. Acad. Sci., Mem., vol. 19, first mem., 90 pp., 18 figs., 1926.

Berkey, Charles Peter.

- 180. Proceedings of the thirty-seventh annual meeting of the Geological Society of America, held at Ithaca, New York, Monday-Wednesday, December 29-31, 1924: Geol. Soc. America, Bull., vol. 36, no. 1, pp. 1-198, 7 pls., March 30, 1925.
- 181. Proceedings of the thirty-eighth annual meeting of the Geological Society of America, held at New Haven, Connecticut, Monday-Wednesday, December 28-30, 1925: Geol. Soc. America, Bull., vol. 37, no. 1, pp. 1-206, March 30, 1926.

Berkey, Charles Peter-Continued.

182. Early history of the earth: Nat. History (Am. Mus. Nat. Hist., Jour.), vol. 26, no. 4, pp. 375-382, 3 figs., July-August, 1926.

183. James Furman Kemp: Eng. and Min. Jour., vol. 122, no. 22, pp. 872-873, November 27, 1926; Min. and Met. Soc. America, Bull. no. 186 (vol. 19. no. 5), pp. 114-116, December, 1926; Science, new ser., vol. 64, pp. 639-642, December 31, 1926.

Berman, Harry. See also Larsen, 1543; Shannon, 2307.

184. Notes on dachiardite: Am. Mineralogist, vol. 10, no. 11, pp. 421-428, 3 figs., November, 1925.

185. The identity of "lehnerite" and ludlamite: Am. Mineralogist, vol. 10, no. 11, pp. 428–429, November, 1925.

Bernewitz, Max Wilhelm von.

186. Handbook for prospectors. ix, 319 pp., 83 figs., New York, McGraw-Hill Book Co., 1926.

Berry, E. Willard.

187. Upper Cretaceous Ostracoda from Maryland: Am. Jour. Sci., 5th ser., vol. 9, pp. 481-487, 1 pl., June, 1925.

188. Protoconchs of Caecum in the Miocene of Maryland: Nautilus, vol. 39, no. 2, pp. 66-67, 1 fig., October, 1925.

Berry, Edward Wilber.

189. Paleobotany; a sketch of the origin and evolution of floras: Smithsonian Inst., Ann. Rept., 1918, pp. 289-407, 36 figs., 6 pls., 1920.

190. The flora of the Ripley formation: U. S. Geol. Survey, Prof. Paper 136, 94 pp., 6 figs., 23 pls., 1925.

191. The Tertiary flora of the Island of Trinidad, B. W. I.: Johns Hopkins Univ., Studies in geology, no. 6, pp. 71-160, 16 pls., 1925.

192. On correlation: Geol. Soc. America, Bull., vol. 36, no. 1, pp. 263-277, March 30, 1925.

193. Ancestry of certain monotypic, ditypic, and small genera of plants (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 224, March 30, 1925.

194. A Pleistocene flora from the Island of Trinidad: U. S. Nat. Mus., Proc., vol. 66, art. 21, 9 pp., 4 pls., May 23, 1925,

195. The environment of the early vertebrates: Am. Naturalist, vol. 59, pp. 354-362, July-August, 1925.

196. Miocene Araceae related to Caladium from Trinidad: Pan-Am. Geologist, vol. 44, no. 1, pp. 38-42, 1 pl., August, 1925.

197. The age and affinities of the Tertiary flora of western Canada: Nat. Acad. Sci., Proc., vol. 11, no. 11, pp. 671-673, November 15, 1925.

198. A new Salvinia from the Eocene [Wyoming and Tennessee]: Torreya, vol. 25, no. 6, pp. 116-118, 1 fig., November-December, 1925.

199. Flora and ecology of so-called Bridger beds of Wind River Basin, Wyoming: Pan-Am. Geologist, vol. 44, no. 5, pp. 357-368, December, 1925.

200. On fossil plants from the Paskapoo formation of Alberta: Roy. Soc. Canada, Proc. and Trans., 3d ser., vol. 20, pt. 2, sec. 4, pp. 189-209, 1 fig., 1926.

Berry, Edward Wilber-Continued.

- 201. The age of certain Mesozoic geological formations in western Canada:
 Roy. Soc. Canada, Proc. and Trans., 3d ser., vol. 20, pt. 2, sec.
 4, pp. 201–206, 1926.
- 202. Pleistocene plants from North Carolina: U. S. Geol. Survey, Prof. Paper 140, pp. 97-119, 13 pls., February 17, 1926.
- 203. Terminalia in the lower Eocene of southeastern North America: Torrey Bot. Club, Bull., vol. 53, no. 2, pp. 59-65, 6 figs., February, 1926.
- 204. Antaeus, or the future of geology: Science, new ser., vol. 63, pp. 475–476, May 7, 1926.
- 205. Tertiary floras from British Columbia: Canada, Geol. Survey, Bull. no. 42, pp. 91-116, 11 pls., May 8, 1926.
- Pre-Columbian petrified wood industry: Pan-Am. Geologist, vol. 45, no. 4,
 pp. 273-276, 1 pl., May, 1926.
- 207. The fossil seeds from the *Titanotherium* beds of Nebraska, their identity and significance: Am. Mus. Novitates, no. 221, 8 pp., 7 figs., June 21, 1926.
- 208. The term Psychozoic: Science, new ser., vol. 64, pp. 16-17, July 2, 1926.
- 209. Fossil leaves from Beaver County, Oklahoma: Oklahoma Geol. Survey, Bull. no. 38, pp. 34–35, 2 pls., August, 1926.
- 210. The romance of collecting fossil plants: Nat. History (Am. Mus. Nat. Hist., Jour.), vol. 26, no. 5, pp. 475—485, 6 figs., September-October, 1926.

Berry, S. Stillman.

211. Fossil chitons from the Pleistocene of San Quintin Bay, Lower California: Am. Jour. Sci., 5th ser., vol. 12, pp. 455-456, November, 1926.

Bevan, Arthur.

- 212. Outline of the geology of the Oregon quadrangle [Illinois]: Illinois State
 Acad. Sci., Trans., vol. 17, pp. 187–193, 1925.
- 213. Transition beds between the St. Peter sandstone and the Platteville limestone: Illinois State Acad. Sci., Trans., vol. 18, pp. 376-377, 1925.
- 214. Rocky Mountain peneplains northeast of Yellowstone Park: Jour. Geology, vol. 33, no. 6, pp. 563-587, 9 figs., August-September, 1925.
- 215. The Glenwood beds as a horizon marker at the base of the Platteville formation: Illinois State Geol. Survey, Rept. Investigations no. 9, 13 pp., 3 figs., 1926.

Bevier, George M.

- 216. The Damon Mound oil field, Texas: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 3, pp. 505-535, 6 figs., 1 pl., May-June, 1925; Geology of salt dome oil fields, pp. 613-643, 6 figs., 1 pl., 1926.
- 217. The Barbers Hill oil field, Chambers County, Texas: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 6, pp. 958–973, 5 figs., September, 1925; Geology of salt dome oil fields, pp. 530–545, 5 figs., 1926.

Bibbins, Arthur Barneveld.

218. A small meteor crater in Texas: Eng. and Min. Jour.-Press, vol. 121, no. 23, p. 932, 1 fig., June 5, 1926.

Billings, M. P.

219. On the mechanics of dike intrusion: Jour. Geology, vol. 33, no. 2, pp. 140-150, 2 figs. (incl. map.), February-March, 1925.

Binney, Edwin, jr.

220. Natural gas from beds of continental accumulation; Golden Eagle gas field, Wyoming: Econ. Geology, vol. 21, no. 7, pp. 665-694, 3 figs., November, 1926.

Birch, Stephen.

221. Geology and mining methods of Kennecott mines: Am. Inst. Min. and Met. Eng., Trans., vol. 72, pp. 499-511, 2 figs., 1925.

Birk, Ralph A.

222. The extension of a portion of the Pontotoc series around the western end of the Arbuckle Mountains: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 6, pp. 983-989, 1 fig. (map), September, 1925.

Bishop, Sherman C. See Hartnagel, 1036.

Bissell, J. L. See Kentucky Geol. Survey, 1376, 1388.

Bissell, Malcolm H.

223. Preglacial course of the Connecticut River near M.ddletown, Connecticut, and its significance: Am. Jour. Sci., 5th ser., vol. 9, pp. 233-240, 2 figs., March, 1925.

224. Possible cause of the semiarid climate of eastern North America in Triassic time (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, pp. 139-140, March 30, 1925.

Blackburn, Chester O. See Van Tuyl, 2646, 2650.

Blackwelder, Eliot. See also Twenhofel, 2599, 2603.

225. Wasatch Mountains revisited (abstract); Geol. Soc. America, Bull., vol. 36, no. 1, pp. 132-133, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 1, pp. 74-75, February, 1925.

226. (and Baddley, Elmer R.). Relations between batholiths and schistosity (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, pp. 208-209, March 30, 1925.

227. Exfoliation as a phase of rock weathering: Jour. Geology, vol. 33, no. 8, pp. 793–806, 6 figs., November-December, 1925.

228. Phosphate deposits of the Pacific (discussion): Econ. Geology, vol. 20, no. 7, pp. 698-699, November, 1925.

229. Fire as an agency in rock weathering (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, pp. 142-143, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 1, p. 91, February, 1926.

230. Photography for the field geologist: Washington Acad. Sci., Jour., vol. 16, no. 4, pp. 93-97, February 19, 1926.

231. Earthquakes in Jackson Hole, Wyoming: Seismologic Soc. America, Bull., vol. 16, no. 3, p. 196, September, 1926.

232. Pre-Cambrian geology of the Medicine Bow Mountains: Geol. Soc. America, Bull., vol. 37, no. 4, pp. 615-658, 11 figs. (incl. maps), December 30, 1926.

Blair, S. M. See Clark, 447.

Blanchard, Roland.

233. Notes on the oxidation products derived from chalcopyrite: Econ. Geology, vol. 20, no. 7, pp. 613-638, 2 figs., 2 pls., November, 1925.

Blanchard, W. O.

234. The geography of southwestern Wisconsin: Wisconsin Geol. and Nat. Hist. Survey, Bull. no. 65, 117 pp., 81 figs., 1924. Bloesch, Edward.

235. Fort Scott-Wetumka correlation: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 8, pp. 810-811, August, 1926.

Bole, G. A. See Stull, 2480.

Bonine, Chesleigh Arthur. See Twenhofel, 2603.

Bowen, Norman Levi.

236. The mineralogical phase rule: Washington Acad. Sci., Jour., vol. 15, no. 13, pp. 280-284, July 19, 1925.

237. The amount of assimilation by the Sudbury norite sheet: Jour. Geology, vol. 33, no. 8, pp. 825–829, 2 figs., November–December, 1925.

238. Concerning "evidence of liquid immiscibility in a silicate magma, Agate Point, Ontario": Jour. Geology, vol. 34, no. 1, pp. 71-73, January-February, 1926.

239. (and Wyckoff, R. W. G.). A petrographic and X-ray study of the thermal dissociation of dumortierite: Washington Acad. Sci., Jour., vol. 16, no. 7, pp. 178–189, 3 figs., April 4, 1926.

Bowie, William.

240. The theory of isostasy in its relation to major earth movements: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 2, pp. 1360-1366 [1924].

241. The causes and prediction of earthquakes: Science, new ser., vol. 61, pp. 379-380, April 10, 1925.

242. Isostasy at Madrid meeting of International Geophysical Union: Pan-Am. Geologist, vol. 43, no. 5, pp. 337-344, June, 1925.

243. Isostatic condition of the United States as indicated by groups of gravity stations: U. S. Coast and Geod. Survey, Serial no. 366, 11 pp., 1 pl. (map), 1926.

244. Proposed theory, in harmony with isostasy, to account for major changes in the elevation of the earth's surface: Gerlands Beiträge zur Geophysik, Bd. 15, H. 2, pp. 103-115, 4 figs., 1926.

245. Geology from the isostatic viewpoint: Sci. Monthly, vol. 22, no. 1, pp. 5-18, 11 figs., January, 1926.

246. Notes on the Airy or "roots of mountains" theory: Science, new ser., vol. 63, pp. 371-374, April 9, 1926.

247. Earthquakes from the isostatic viewpoint: Washington Acad. Sci., Jour., vol. 16, no. 9, pp. 245-250, May 4, 1926.

248. The relation of isostasy to seismology: Am. Jour. Sci., 5th ser., vol. 12, pp. 415–418, November, 1926.

249. (and others). Discussion following Symposium on the constitution of the earth and the inferences to be drawn from it: Nat. Research Council, Bull., vol. 11, pt. 2, no. 56, pp. 33–39, November, 1926.

Bowles, Oliver.

250. (and Farnsworth, Marie). Physical chemistry of the calcium sulphates, and gypsum reserves: Econ. Geology, vol. 20, no. 8, pp. 738-745, December, 1925.

Bowman, W. F.

251. The South Dayton salt dome. Liberty County, Texas: Am. Assoc. Petro leum Geologists, Bull., vol. 9, no. 3, pp. 655-666, 5 figs., May-June, 1925; Geology of salt dome oil fields, pp. 558-569, 5 figs., 1926.

Bownocker, John Adams. See also White, 3001.

252. Glass sands of Ohio: Ohio Jour. Sci., vol. 26, no. 1, pp. 25-41, January, 1926.

253. The Pittsburgh coal bed of Ohio: Am. Inst. Min. and Met. Eng., Trans. [preprint], no. 1605, 10 pp., 1 fig. (map), October, 1926.

Boydell, H. C.

254. The rôle of colloidal solutions in the formation of mineral deposits: Inst. Min. and Met., Bull., no. 243, 108 pp., December, 1924.

255. A physico-chemical theory of metasomatism: Econ, Geology, vol. 20, no. 4, pp. 388-391, June-July, 1925; (discussion), vol. 21, no. 8, pp. 806-807, December, 1926.

256. Veindikes of the Engineer mine [Atlin, British Columbia]: Eng. and Min. Jour.-Press, vol. 120, no. 14, pp. 538-539, October 3, 1925.

257. Economic geology and the mining industry: Inst. Min, and Met., Bull., no. 254, 12 pp., November, 1925; discussion, no. 270, pp. 27-33, March, 1927.

258. Wood tin in the Tertiary rhyolites of northern Nevada (discussion): Econ. Geology, vol. 20, no. 8, pp. 768-770, December, 1925.

259. A discussion on metasomatism and the linear "force of growing crystals": Econ. Geology, vol. 21, no. 1, pp. 1-55, 8 figs., 2 pls., January-February, 1926.

260. The Camp Bird compound "veindike" (discussion): Econ. Geology, vol. 21, no. 2, pp. 185-190, March-April, 1926.

261. Relations between solubility and pressure (discussion): Econ. Geology, vol. 21, no. 7, pp. 712-717, November, 1926.

Boyer, C. S.

262. List of Quaternary and Tertiary Diatomaceae from deposits of southern Canada: Canada, Victoria Memorial Mus., Mus. Bull. no. 45, 27 pp., November 9, 1926.

Bradley, John H.

263. How old is the earth?: Sci. Monthly, vol. 23, no. 3, pp. 260-264, September, 1926.

Bradley, John H., jr.

264. Trilobites of the Beekmantown in the Philipsburg region of Quebec: Canadian Field-Naturalist, vol. 39, no. 1, pp. 5-9, 1 pl., January, 1925.

265. Stratigraphy of the Kimmswick limestone of Missouri and Illinois: Jour. Geology, vol. 33, no. 1, pp. 49-74, January-February, 1925.

Bradley, Walter Wadsworth.

266. Magnesite in California: California State Min. Bur., Bull. no. 79, 147 pp., 62 illus., 11 pls., 1925.

267. California mineral production for 1924: California State Min. Bur., Bull. no. 96, 174 pp., 1 fig., 1925.

268. California mineral production for 1925: California State Min. Bur., Bull. no. 97, 172 pp., illus., September, 1926.

Bradley, Wilmot H.

269. A contribution to the origin of the Green River formation and its oil shale: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 2, pp. 247-262, 410, March-April, 1925.

270. An interpretation of the Green River formation (abstract): Washington Acad. Sci., Jour., vol. 16, no. 3, pp. 74-75, February 4, 1926.

Bradley, Wilmot H.—Continued.

271. Shore phases of the Green River formation in northern Sweetwater County, Wyoming: U. S. Geol. Survey, Prof. Paper 140, pp. 121– 131, 2 figs., 5 pls. (incl. map), February 13, 1926.

272. Fossil rhizopods of the Green River oil shale (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 160, March 30, 1926; Pan-Am-Geologist, vol. 45, no. 2, p. 161, March, 1926.

Bramlette, Milton N.

273. A subsurface correlation of the stratigraphic units from Russell County to Marion County, Kansas: Kansas State Geol. Survey, Bull. 10, pp. 86-93, 1925.

274. Paleozoic formations penetrated by wells in Tishomingo County, north-eastern Mississippi; U. S. Geol. Survey, Bull. 781, pp. 1-10, 1 pl., July, 1925.

Branner, George C.

275. Arkansas Geological Survey [activities]: Pan-Am. Geologist, vol. 44, no. 4, pp. 322–323, 1 fig., November, 1925.

Branson, Edwin Bayer.

276. Course of the Gunnison River in Colorado (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 139, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 1, p. 80, February, 1925.

277. (and Williams, J. S.) Relationship of upper Devonian and lower Mississippian faunas of Missouri (abstract); Geol. Soc. America, Bull., vol. 36, no. 1, pp. 216–217, March 30, 1925.

278. Mississippian series of Missouri (abstract): Pan-Am. Geologist, vol. 45, no. 2, p. 174, March, 1926.

279. Origin and development of stream valleys (abstract): Pan-Am. Geologist, vol. 45, no. 2, p. 173, March, 1926.

280. Correlation of Mississippian section of Rocky Mountain States and Mississippi Valley States (abstract): Pan-Am. Geologist, vol. 45, no. 3, p. 248, April, 1926.

281. Old shore lines and origin of oil (abstract): Pan-Am. Geologist, vol. 45 no. 3, p. 252, April, 1926.

282. Near shore conditions important in locating petroleum deposits: Oil and Gas Jour., vol, 24, no. 45, pp. 94, 96, April 1, 1926.

Bray, H. G. See Moon, 1827.

Bretz, J. Harlen.

283. The origin of man: Illinois State Acad. Sci., Trans., vol. 19, pp. 61-85, 1926.

284. Geological processes and the earth's history. In The nature of the world and of man, pp. 56-84, 1 pl., 1 insert (table of earth history), University of Chicago Press, 1926.

285. The Spokane flood beyond the channeled scablands: Jour. Geology, vol. 33, no. 2, pp. 97–115, February–March, no. 3, pp. 236–259, 17 figs., April–May, 1925; abstract, Geol. Soc. America, Bull., vol. 36, no. 1, p. 144, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, p. 146, March, 1925.

Brewer, William M.

286. Mineral resources tributary to the coast section of the Pacific Great Eastern Railway: Canadian Inst. Min. and Met., Bull., no. 160 pp. 798-808, 1 fig., 1 pl., August, 1925; Trans., vol. 28, pp. 387-397 1 fig. [1926].

Brock, Reginald Walter.

287. Physiography of Canada: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 1, pp. 686-692, 1 fig. [1924].

288. Structure of the Pacific region of Canada: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 1, pp. 776-783, 1 fig. (map) [1924].

289. Ore deposits of the Pacific region of Canada: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 1, pp. 815-820, 1 fig. (map) [1924].

290. Petroleum provinces of Canada: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 2, pp. 1168-1173 [1924].

291. Miller, the geologist: Canadian Min. Jour., vol. 46, no. 9, February 27,

292. Success [eulogy of W. G. Miller]: Econ. Geology, vol. 20, no. 8, pp. 762-765, December, 1925.

Brooks, Alfred Hulse,

293. (and Capps, S. R.). Gold, silver, copper, and lead in Alaska (mines report): U. S. Geol. Survey, Mineral Resources, 1922, pt. 1, pp. 637-642, 1925,

294. Alaska's mineral resources and production, 1923: U. S. Geol. Survey, Bull, 773, pp. 3-52, 1925.

295. Mineral resources of Alaska, 1923; Administrative report; U. S. Geol. Survey, Bull. 773, pp. 63-69, 1925.

Broom, Robert.

296. On the classification of the reptiles: Am. Mus. Nat. Hist., Bull., vol. 51, pp. 39-65, 13 figs., September 17, 1924.

297. Further evidence on the structure of the Eosuchia: Am. Mus. Nat. Hist., Bull., vol. 51, pp. 67-76, 4 figs., September 17, 1924.

Brown, Ernest W.

298. Tidal oscillations in Halemaumau, the lava pit of Kilauea; Am. Jour. Sci., 5th ser., vol. 9, pp. 7-112, 4 figs., February, 1925.

299. Tides in lava (abstract with discussion): Washington Acad. Sci., Jour, vol. 15, no. 18, pp. 421-422, November 4, 1925; Bull. volcanologique, 2º ann., nos. 5-6, p. 333, 1925.

300. The evidences for changes in the rate of rotation of the earth and their geophysical consequences: Nat. Acad. Sci., Proc., vol. 12, no. 6, pp. 406-412, June, 1926; abstract, Science, new ser., vol. 63, p. 484, May 7, 1926.

Brown, George Granger.

301. Clays and shales of Michigan and their uses: Michigan, Geol. Survey, Pub. 36, geol. ser. 30, 444 pp., 69 figs., 41 pls. (incl. map) [1926].

Brown, John Stafford. See also Dake, 579.

302. A study of coastal ground water with special reference to Connecticut: U. S. Geol. Survey, Water-Supply Paper 537, 101 pp., 20 figs., 7 pls., 1925.

303. Graphite deposits of Ashland, Alabama: Econ. Geology, vol. 20, no. 3. pp. 208-248, 2 figs. (incl. map), 2 pls., May, 1925.

304. The Nixon Fork country [Alaska]: U. S. Geol, Survey, Bull. 783, pp. 97-144, 3 figs., 2 pls. (maps), 1926.

305. Silver-lead prospects near Ruby [Alaska]: U. S. Geol. Survey, Bull. 783, pp. 145-150, 1 fig., 1926.

Brown, W. Horatio.

306. A probable fossil glacier: Jour. Geology, vol. 33, no. 4, pp. 464-466, 1 fig., May-June, 1925.

Brown, W. Horatio-Continued.

307. Geological section along Rio de San Lorenzo in Sinaloa, Mexico: Eng. and Min. Jour.-Press, vol. 120, no. 18, pp. 691, 779, 1 fig., October 31, 1925.

308. The mineral zones of the White Cross district and neighboring deposits in Hinsdale County, Colorado: Colorado School of Mines Mag., vol. 15, no. 11, pp. 5-15, 5 figs., March, 1926.

Browning, I. B. See Kentucky Geological Survey, 1381, 1389, 1396.

Browning, W. C.

309. (and Snow, F. W.). Geology and operations of the Magma mine [Superior district, Pinal County, Arizona]: Eng. and Min. Jour.-Press, vol. 119, no. 5, pp. 197-201, 4 figs., January 31, 1925.

Bruce, Everend Lester.

310. The Coutchiching rocks of the Bear's Pass section, Rainy Lake [Ontario]: Roy. Soc. Canada, Proc. and Trans., 3d ser., vol. 19, sec. 4, pp. 43-46, 1 pl., 1925.

311. Future of the Ontario iron deposits: Canadian Min. Jour., vol. 46, no. 3.

pp. 71-75, 1 fig., January 16, 1925.

312. Gold deposits of Kenora and Rainy River districts: Ontario Dept. Mines, 34th Ann. Rept., vol. 34, pt. 6, pp. 1–42, illus., map, 1925; in part, Canadian Min. Jour., vol. 47, no. 8, pp. 181–185, 7 figs., February 19; no. 11, pp. 264–265, 1 fig., March 12, 1926.

313. Red Lake area of Patricia [Ontario]: Canadian Inst. Min. and Met., Bull., no. 166, pp. 256-269, 6 pls., February, 1926; discussion by Geo. W. Bain, R. E. Hore, W. Lindgren, J. J. O'Neill, and others, no. 169, pp. 662-670, May, 1926; Trans. (with discussion), vol. 29, pp. 196-219, 7 pls. [1927].

Brucks, Ernest W.

314. The Luling field, Caldwell and Guadalupe count'es, Texas: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 3, pp. 632-654, 7 figs., 1 pl., May-June, 1925.

Brunton, Stopford.

315. The gold deposits of Nova Scotia; an analysis of the history and present status and a hypothesis concerning the structural features of the province in relation to the deposition of gold: Canadian Inst. Min. and Met., Bull., no. 171, pp. 781–847, 29 figs., July, 1926; discussion, no. 175,, pp. 1171–1172, November, 1926; (with discussion) Trans., vol. 29, pp. 424–497, 29 figs. [1927].

Bryan, Kirk, See also Meinzer, 1751; Pardee, 1950, 1951; Twenhofel, 2603.

316. The Papago country, Arizona; a geographic, geologic, and hydrologic reconnaissance with a guide to desert watering places: U. S. Geol. Survey, Water-Supply Paper 499, 436 pp., 41 figs., 27 pls. (incl. maps), 1925.

317. Pedestal rocks: Eng. and Min. Jour.-Press, vol. 119, no. 4, pp. 172–173, January 24, 1925.

318. Pedestal rocks in stream channels: U. S. Geol. Survey, Bull. 760, pp. 123–128, 2 pls., April, 1925.

319. Date of channel trenching (arroyo cutting) in the arid Southwest: Science, new ser., vol. 62, pp. 338-344, October 16, 1925.

320. Ground water reconnaissance in Socorro County, New Mexico: New Mexico, State Engineer, 7th Bienn. Rept., pp. 77–87 [1926].

Bryan, Kirk-Continued.

321. Ground water reconnaissance in De Baca County, New Mexico: New Mexico, State Engineer, 7th Bienn. Rept., pp. 88–102, 2 pls. [1926].

322. Recent deposits of Chaco Canyon, New Mexico, in relation to the life of prehistoric peoples of Pueblo Bonito (abstract): Washington Acad. Sci., Jour., vol. 16, no. 3, pp. 75-76, February 4, 1926.

323. San Pedro Valley, Arizona, and the geographic cycle (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, pp. 169–170, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, p. 166, March, 1926.

324. (and Gidley, J. W.). Vertebrate fossils and their enclosing deposits from the shore of Pleistocene Lake Cochise, Arizona: Am. Jour. Sci., 5th ser., vol. 11, pp. 477–488, 2 figs., June, 1926.

325. Pedestal rocks formed by differential erosion: U. S. Geol, Survey, Bull 790, pp. 1–15, 1 fig., 3 pls., November 27, 1926.

326. Channel erosion of the Rio Salado, Socorro County, New Mexico: U. S. Geol. Survey, Bull. 790, pp. 17-19, November 27, 1926.

Bryan, L. L. See Stearns, 2437.

Bryant, William L.

327. On the structure of *Palaeaspis* and on the occurrence in the United States of fossil fishes belonging to the family Pteraspidae: Am. Philos. Soc., Proc., vol. 65, no. 4, pp. 256–271, 3 figs., 4 pls., 1926.

328. Evidence of the presence of chordates in the Cambrian (abstract):
Geol. Soc. America, Bull., vol. 37, no. 1, p. 236, March 30, 1926.

Buchanan, George S.

329. Early Pennsylvanian "red beds" in the Mid-Continent region: Am.
Assoc. Petroleum Geologists, Bull., vol. 9, no. 4, p. 814, July, 1925.

Bucher, Walter H.

330. Geology of Jeptha Knob: Kentucky Geol. Survey, ser. 6, vol. 21, pp. 193-237, 11 figs., map, 1925.

331. Crypto-volcanic structures of Europe and America (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 149, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, pp. 148-149, March, 1925.

332. Submarine denudation (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 143, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 1, p. 91, February, 1926.

Buddington, Arthur Francis. See also Smyth, 2386.

333. Mineral investigations in southeastern Alaska: U. S. Geol Survey, Bull. 773, pp. 71–139, 5 figs., 2 pls. (maps), 1925.

334. Mineral investigations in southeastern Alaska: U. S. Geol. Survey, Bull. 783, pp. 41–62, 1 fig., 3 pls., 1926.

335. Submarine pillow lavas of southeastern Alaska: Jour. Geology, vol. 34, no. 8, pp. 824–828, November–December, 1926.

Budrow, L. R. See Mishler, 1820.

Buehler, Henry Andrew.

336. Biennial report of the State geologist [for the years 1923 and 1924]: Missouri, Bur. Geology and Mines, 143 pp. [1925].

337. Missouri Bureau of Geology and Mines [activities]: Pan-Am. Geologist, vol. 44, no. 4, pp. 323-325, November, 1925.

86012—28——3 (1917) — (

Bullard, Fred M.

338. Geology of Love County, Oklahoma: Oklahoma Geol. Survey, Bull. no. 33, 77 pp., 1 fig., 29 pls. (incl. map), January, 1925.

339. Geology of Marshall County, Oklahoma: Oklahoma Geol. Survey, Bull. no. 39, 101 pp., 5 figs., 21 pls. (incl. maps), April, 1926.

Bump, James D.

340. A huge fossil fish [Portheus, from near Hot Springs, South Dakota]:
Black Hills Engineer, vol. 14, no. 2, pp. 99-101, 1 fig., March, 1926.

Bunn, John R. See George, 879.

Burchard, Ernest Francis.

341. Bauxite in northeastern Mississippi: U. S. Geol. Survey, Bull. 750, pp. 101–146, 3 figs., January 9, 1925.

342. (and Davis, Hubert W.). Iron ore, pig iron, and steel in 1923: U. S. Geol. Survey, Mineral Resources, 1923, pt. 1, pp. 295–329, 4 figs., January 22, 1925.

343. (and Davis, Hubert W.). Iron ore, pig iron, and steel in 1924: U. S. Bur. Mines, Mineral Resources U. S., 1924, pt. 1, pp. 297–333, 4 figs., May 14, 1926.

Burckhardt, Carlos.

344. Faunas del Aptiano de Nazas, Durango: Mexico, Inst. Geol., Bol. no. 45, 71 pp., 10 pls., 1925.

Burden, Douglas.

345. Niznaz Boko, the Great Hole in the Ground: Natural History (Am. Mus. Nat. Hist., Jour.), vol. 26, no. 6, pp. 627-634, 9 figs., November-December, 1926.

Burroughs, Wilbur Greeley.

346. The geography of the western Kentucky coal field: Kentucky Geol. Survey, ser. 6, vol. 24, 211 pp., 21 figs., 50 pls., 1924 [c. 1925].

347. Activities of geological surveys in southern States: Eng. and Min. Jour.

Press, vol. 120, no. 9, p. 350, August 29, 1925.

348. The geography of the Kentucky Knobs: Kentucky Geol. Survey, ser. 6, vol. 19, 284 pp., 56 figs., 1926.

Burrows, Alfred Granville.

349. (and Hopkins, P. E.). Kirkland Lake gold area: Ontario Dept. Mines, 32d Ann. Rept., vol. 32, pt. 4, pp. 1–52, illus., 1925.

350. The Porcupine gold area: Ontario Dept. Mines, 33d Ann. Rept., vol. 33, pt. 2, pp. 1–84, illus., map, 1925.

351. Recent mining developments in Ontario: Canadian Inst. Min. and Met., Bull., no. 156, pp. 351–366, 1 fig., April, 1925.

352. The Porcupine porphyry stocks [Ontario]: Canadian Min. Jour., vol. 46, no. 26, pp. 632-633, 3 figs., June 26, 1925.

353. Occurrence of gold near Beardmore, Ontario: Canadian Min. Jour., vol. 46, no. 36, pp. 839-840, September 4, 1925.

354. Gowganda silver area: Ontario Dept. Mines, 35th Ann. Rept., vol. 35, pt. 3, pp. 1-61, illus., map, 1926.

355. Silver deposits of Gowganda area: Canadian Min. Jour., vol. 47, no. 50, pp. 1167-1169, 8 figs., December 10, 1926.

Burton, W. D.

356. Ore deposition at Premier mine, British Columbia: Econ. Geology, vol. 21, no. 6, pp. 586-604, 2 figs., September, 1926.

Bushnell, T. M.

357. Notes on areal geology of Jasper County, Indiana: Indiana Acad. Sci., Proc., vol. 34, pp. 133–135, 1925.

358. Some geological features of Wayne County, Indiana: Indiana Acad. Sci., Proc., vol. 35, pp. 87-90, 2 figs., 1926.

Butts, Charles.

359. Geology and mineral resources of the Equality-Shawneetown area (parts of Gallatin and Saline counties): Illinois State Geol. Survey, Bull. no. 47, 76 pp., 5 figs., 3 pls. (incl. maps), 1925.

360. (and Nelson, Wilbur A.). Geology and mineral resources of the Cross-ville quadrangle, Tennessee: Tennessee, Dept. Educ., Div. Geology,

Bull. 33-D, 41 pp., 1 fig., 12 pls. (incl. map), 1925.

361. Coal fields of Alabama; U. S., Bur. Mines, Tech. Paper 347, pp. 1–7, 1 fig., 1925; Alabama Geol. Survey, Bull. 31, pp. 1–7, 3 figs., 1926.

362. Geology of Alabama; The Paleozoic rocks: Alabama, Geol. Survey, Spec. Rept. no. 14, pp. 41–230, 4 figs., 74 pls., 1926.

Buwalda, John Peter.

- 363. Proceedings of the twenty-third annual meeting of the Cordilleran section of the Geological Society of America, held at Stanford University, California, May 2 and 3, 1924; Geol. Soc. America, Bull., vol. 36, no. 1, pp. 199-210, March 30, 1925.
- 364. Proceedings of the twenty-fourth annual meeting of the Cordilleran section of the Geological Society of America, held at Berkeley, California, February 20 and 21, 1925: Geol. Soc. America, Bull., vol. 37, no. 1, pp. 207–224, March 30, 1926.

365. Certain inferences regarding the nature of the movements along the Hayward fault zone [California] (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 212, March 30, 1926.

366. Certain events in the interesting geological history of Oregon: Oregon, Univ., Commonwealth Rev., vols. 8-9, nos. 4 and 1, pp. 121-129, October-January, 1926-7.

367. [Report on paleontological research]: Carnegie Inst. Washington, Year Book no. 25, 1925-6, pp. 4-5, December, 1926.

Bybee, Halbert P.

368. (and Short, R. T.). The Lytton Springs oil field: Texas, Univ., Bull., no. 2539, 69 pp., 3 figs., 9 pls. (incl. maps), December, 1925.

Byerly, Perry. See also Macelwane, 1667.

369. Notes on the intensity of the Santa Barbara earthquake between Santa Barbara and San Luis Obispo [California]: Seismological Soc. America, Bull., vol. 15, no. 4, pp. 279–281, December, 1925.

370. The depth of focus of two recent earthquakes and the depth of the surface layer of the earth in California: Seismological Soc. America,

Bull., vol. 16, no. 1, pp. 1-9, 1 pl., March, 1926.

371. Tables of earthquake waves reflected at a discontinuity at a depth of fifty kilometers: Seismological Soc. America, Bull., vol. 16, no. 1, pp. 10-14, March, 1926.

372. A seismological note: Science, new ser., vol. 63, p. 307, March 19, 1926.

373. (and Mitchell, George D.). The registration of earthquakes at the Berkeley Station and at the Lick Observatory Station from April 1, 1924, to September 30, 1924: California, Univ., Seismographic Stations, Bull., vol. 2, no. 8, pp. 121–140, August 24, 1926.

Byerly, Perry-Continued.

374. (and Mitchell, George D.). The registration of earthquakes at the Berkeley Station and at the Lick Observatory Station, October 1, 1924, to March 31, 1925: California, Univ., Seismographic Stations, Bull., vol. 2, no. 9, pp. 141–154, September 23, 1926.

375. The measurement of time on seismograms: Seismologic Soc. America, Bull., vol. 16, no. 3, pp. 194–195, 2 figs., September, 1926.

376. The Montana earthquake of June 28, 1925, G. M. C. T.: Seismological Soc. America, Bull., vol. 16, no. 4, pp. 209–265, 1 fig., 11 pls., December, 1926.

Cabeen, Charles K. See Kerr, 1405.

Cable, Emmett J.

377. Extension of Dakota sandstone into Cherokee County [Iowa] (abstract):
Pan-Am. Geologist, vol. 46, no. 5, pp. 401-402, December, 1926.

378. Pleistocene bone deposits at Cherokee, Iowa (abstract): Pan-Am. Geologist, vol. 46, no. 5, p. 402, December, 1926.

Cadman, W. K.

379. Phantograph model: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 12, pp. 1300–1303, 1 fig., December, 1926.

Cady, Gilbert Haven.

380. Structure of parts of northeastern Williamson and western Saline counties: Illinois State Geol. Survey, Report of Investigations no. 2, 20 pp., 2 figs., 3 pls. (incl. maps), 1925.

381. The areal geology of Saline County: Illinois State Acad. Sci., Trans., vol. 19, pp. 250-272, 5 figs. (incl. maps), 1 pl., 1926.

Cairnes, Clive Elmore.

382. Pemberton area, Lillooet district, British Columbia: Canada, Geol. Survey, Summ. Rept., 1924, pt. A, pp. 76-99, 1 pl., map, 1925.

383. Nickeliferous mineral deposit, Emory Creek, Yale mining division, British Columbia: Canada, Geol. Survey, Summ. Rept., 1924, pt. A, pp. 100–105, 3 pls., 1925.

384. Preliminary report on Slocan mining area, British Columbia: Canada, Geol. Survey, Summ. Rept., 1925, pt. A, pp. 182-221, 1926.

Calvache, Antonio.

385. Resumen de la historia de la minería de Cuba: Cuba, Dirección de montes y minas, Bol. minas, no. 8, pp. 22–35, August, 1925.

386. Reconocimiento geológico preliminar del terreno en que se construirán las distintes secciones del acueducto definitivo para Santiago de Cuba: Cuba, Dirección de montes y minas, Bol. minas, no. 8, pp. 36-44, 9 figs., August, 1925.

387. (and Roque Allende). Informe geológico sobre el proyecto de acueducto para la ciudad de Santiago de Cuba: Cuba, Dirección de montes y minas, Bol. minas, no. 9, pp. 7–30 ,16 figs., 1926.

Camacho, Heriberto.

388. Las aguas subterráneas del valle de Morelia, Estado de Michoacán:
Mexico, Inst. geol., Anales, t. 2, nos. 1-3, pp. 5-17, 11 pls. (incl.
map), 1925.

389. Apuntes acerca de la actividad del Popocatepetl en relación con la sismología: Mexico, Inst. geol., Anales, t. 2, nos. 1-3, pp. 38-67, 16 pls. (incl. map), 1925.

Camacho, Heriberto-Continued.

390. Apuntes para la hidrología de la región sud-oriental del Estado de Querétaro: Mexico, Inst. geol., Anales, t. 2, nos. 1–3, pp. 68–88, 13 pls., 1925.

Campbell, J. Morrow.

391. Genesis of igneous ore deposits: Econ. Geology, vol. 20, no. 5, pp. 491–495, August, 1925.

Campbell, Marius Robison. See also Eby, 704; LaForge, 1513.

392. (and others). Geologic map of Wyoming: U. S. Geol. Survey, Geologic Atlas of the United States, State of Wyoming, 1925. Scale, 1:500,000.

393. (and others). The Valley coal fields of Virginia: Virginia Geol. Survey, Bull. no. 25, pp. 1–300, 30 figs., 27 pls. (incl. map), 1925. Extract, Metamorphism of Virginia coals: Pan-Am. Geologist, vol. 44, no. 1, pp. 62–65, August, 1925.

394. David Talbot Day: Am. Inst. Min. and Met. Eng., Trans., vol. 71, pp. 1071–1073, 1 fig. (portr.), 1925; Mining and Metallurgy, vol. 6, no. 222, pp. 302–304, 1 fig. (portr.), June, 1925.

Campbell, Stewart.

395. Twenty-sixth annual report of the mining industry of Idaho for the year 1924. 249 pp., illus. [1925].

396. Twenty-seventh annual report of the mining industry of Idaho for the year 1925. 270 pp., illus. [1926].

Camsell, Charles.

397. Report of the Department of Mines [of the Dominion of Canada] for the fiscal year ending March 31, 1924, pp. 1-8, 1925.

398. Report of the Department of Mines [of the Dominion of Canada] for the fiscal year ending March 31, 1925, pp. 1-10, 1925.

399. Report of the Department of Mines [of the Dominion of Canada] for the fiscal year ending March 31, 1926, pp. 1-8, 1926.

Canu, Ferdinand. See also Wade, 2685.

400. (and Bassler, Ray S.). Studies on the cyclostomatous Bryozoa: U. S. Nat. Mus., Proc., vol. 67, art. 21, 124 pp., 46 figs., 31 pls., March 29, 1926.

Capps, Stephen Reid. See also Brooks, 293.

401. Willow Creek district [Alaska]: U. S. Geol. Survey, Bull. 773, pp. 39-43, 1925.

402. An early Tertiary placer deposit in the Yentna district [Alaska]: U. S. Geol. Survey, Bull. 773, pp. 53-61, 2 figs., 1925.

403. (and Short, M. N.). A ruby silver prospect in Alaska [upper Susitna Basin]: U. S. Geol. Survey, Bull. 783, pp. 89-95, 1 fig., 1926.

Carlson, Charles Gordon. See also Waring, 2726.

404. Geological notes on a part of southern Trinidad. British West Indies:

Econ. Geology, vol. 20, no. 2, pp. 153–167, 2 figs. (incl. map),

March-April, 1925.

Carmichael, Ferga.

405. Oxidation of sulphides: Toronto, Univ., Studies, Geol. ser., no. 22, pp. 29-36, 1926.

Carpenter, Frank M.

406. Fossil insects from the lower Permian of Kansas: Harvard Coll., Mus. Comp. Zoology, Bull., vol. 67, no. 13, pp. 437-444, 3 pls., July, 1926.

Carsey, Dorothy Ogden.

407. Foraminifera of the Cretaceous of central Texas: Texas, Univ., Bull., no. 2612, 56 pp., 8 pls., July, 1926.

Carson, Carlton M.

408. Pliocene faunal zones in southern California: Pan-Am. Geologist, vol. 43, no. 4, pp. 265-270, May, 1925.

409. Some new species from the Pliocene of southern California, with a few changes in nomenclature: Southern California Acad. Sci., Bull., vol. 24, pt. 2, pp. 31–35, 1 pl., August 17, 1925.

Cartwright, C. E.

410. Notes on the nonmetallic minerals of the Lillooet district [British Columbia]: Canadian Inst. Min. and Met., Bull., no. 160, pp. 824-830, 3 figs., August, 1925; Trans., vol. 28, pp. 414-420, 3 figs. [1926].

Case, Ermine Cowles.

 Environmental conditions of the Permian vertebrates: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 2, pp. 1047-1049 [1924].

412. Some new specimens of Triassic vertebrates in the museum of geology of the University of Michigan: Michigan Acad. Science, Arts, and Letters, Papers, vol. 4, pt. 1, pp. 419-423, 4 figs., 3 pls., February, 1925.

413. The use of bakelite in the preservation of fossil material: Science, new ser., vol. 61, pp. 543-544, May 22, 1925.

414. A specimen of Stelemys nebrascensis Leidy, with the skull preserved:
Michigan, Univ., Mus. Geology, Contr., vol. 2, no. 4, pp. 87-91, 7
figs., June 3, 1925.

415. Note on a new species of the Eocene crocodilian Allognathosuchus, A. wartheni: Michigan, Univ., Mus. Geology, Contr., vol. 2, no. 5, pp. 93-97, 1 fig., 1 pl., June 3, 1925.

416. Environment of tetrapod life in the late Paleozoic of regions other than North America: Carnegie Inst. Washington, Pub. no. 375, 211 pp., 23 figs., December, 1926.

Catlin, C. N.

417. Character of the ground-water resources of Arizona; Arizona, Univ., Coll. Agr., Agr. Exp. Sta., Bull. no. 114, pp. 173–293, March 1, 1926.

Chadwick, George Halcott.

418. The stratigraphy of the Chemung group in western New York: New York State Mus., Bull. no. 251, pp. 149-157, 1 fig., 1924.

419. Chagrin formation of Ohio: Geol. Soc. America, Bull., vol. 36, no. 3, pp. 455-464, 2 figs., September 30, 1925.

Chamberlain, Charles Joseph.

420. The origin of the cycads: Science, new ser., vol. 61, pp. 73–77, January 23, 1925.

Chamberlin, Rollin Thomas.

421. The wedge theory of diastrophism: Jour. Geology, vol. 33, no. 8, pp. 755–792, 14 figs., November–December, 1925.

422. The origin and early stages of the earth. In The nature of the world and of man, pp. 31-55, 3 figs., University of Chicago Press, 1926.

Chamberlin, Thomas Chrowder.

423. Study of fundamental problems in geology: Carnegie Inst. Washington, Year Book no. 24, pp. 344-345, December, 1925.

424. Study of fundamental problems of geology: Carnegie Inst. Washington, Year Book no. 25, 1925–26, pp. 372–387, December, 1926.

425. Certain phases of megatectonic geology: Jour. Geology, vol. 34, no. 1, pp. 1–28, January–February, 1926.

Champion, Milton M. See Hubbard, 1192.

Chaney, Ralph Works. See also Clements, 458.

426. Notes on the occurrence of terrestrial plant fossils in association with marine deposits in the western United States: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 1, p. 882 [1924].

427. A note on the intercontinental relationships of a Tertiary flora: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 1, p. 883 [1924].

428. Tertiary forests and climates in the Great Basin and Great Plains (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 218, March 30, 1925.

429. A comparative study of the Bridge Creek flora and the modern redwood forest: Carnegie Inst. Washington, Pub. no. 349 (Studies on the fossil flora and fauna of the western United States), pp. 1–22, 7 pls., August, 1925.

430. The Mascall flora; its distribution and climatic relation: Carnegie Inst. Washington, Pub. no. 349 (Studies on the fossil flora and fauna of the western United States), pp. 23-48, 1 fig., 1 pl., August, 1925.

431. Notes on two fossil hackberries from the Tertiary of the western United States: Carnegie Inst. Washington, Pub. no. 349 (Studies on the fossil flora and fauna of the western United States), pp. 49–56, 1. pl., August, 1925.

432. A record of the presence of *Umbellularia* in the Tertiary of the western United States: Carnegie Inst. Washington, Pub. no. 349 (Studies on the fossil flora and fauna of the western United States), pp. 57-62, 1 pl., August, 1925.

433. [Studies of the Tertiary floras of the western United States]: Carnegie Inst. Washington, Year Book, no. 24, pp. 356-357, December, 1925.

434. Relationships of the marine and fresh-water Tertiary of western North America, based on recent collections of fossil plants (abstract):

Geol. Soc. America, Bull., vol. 37, no. 1, pp. 213–214, March 30, 1926.

435. [Report on paleontological research]: Carnegie Inst. Washington, Year Book no. 25, 1925-6, pp. 399-402, December, 1926.

Chang, M. S. See Ehlers, 712, 713.

Christner, D. D. See Beede, 160, 161.

Clapp, Frederick Gardner.

436. Some essentials for successful oil development: New Zealand Mining Congress, Dunedin Meeting, Proc., pp. 63–78, 1926; Eng. and Min. Jour., vol. 122, no. 15, pp. 571–576, October 9, 1926.

Clark, Bruce Lawrence.

437. A summary of work in progress on the Tertiary and Quaternary of western North America: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 1, pp. 874–879 [1924].

Clark, Bruce Lawrence-Continued.

438. Thrust faulting in the region of Mount Diablo [California]: Min. and Oil Bull., vol. 10, no. 11, pp. 1133, 1181, 1200, November, 1924.

439. Pelecypoda from the marine Oligocene of western North America: California, Univ., Dept. Geol. Sci., Bull., vol. 15, no. 4, pp. 69-136, 15 pls., January 5, 1925.

440. Thrust faulting in the Mount Diablo region of middle California (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 152, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, p. 150, March, 1925.

441. Preliminary report on the geology of Mount Diablo [California] (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, pp. 205-206, March 30, 1925.

442. (and Stewart, Ralph B.). Domengine horizon (middle Eocene), a newly recognized division in the Eocene of California (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 227, March 30, 1925.

443. Preliminary study of geology of Mount Diablo and Byron regions, California (abstract): Pan-Am. Geologist, vol. 43, no. 5, p. 378, June, 1925.

444. The Domengine horizon, middle Eocene of California: California, Univ.,
Dept. Geol. Sci., Bull., vol. 16, no. 5, pp. 99–118, 1 fig., November
4, 1926.

Clark, George Huntington.

445. Rock asphalts of Alabama and their use in paving: Alabama, Geol. Survey, Special Rept. no. 13, 96 pp., 14 pls., 1925.

Clark, Glenn C.

446. Wilcox sand production, Tonkawa field, Oklahoma: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 9, pp. 885–891, 4 figs., 2 pls., September, 1926.

Clark, J. M. See Whorton, 2809.

Clark K. A

447. (and Blair, S. M.). The bituminous sands of northern Alberta: Alberta, Scientific and Industrial Research Council, 5th Ann. Rept. (Rept. no. 12), pp. 46-65, 3 figs., 1925.

Clark, Robert W.

448. Oil and gas in Oklahoma; Geology and oil and gas development in Okmulgee County, Oklahoma: Oklahoma Geol. Survey, Bull. no. 40-F, 28 pp., 6 figs., map, December, 1926.

Clark, Stuart K.

449. Thomas oil field, Kay County, Oklahoma: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 7, pp. 643-655, 7 figs., July, 1926.

Clark, Thomas Henry. See also Sayles, 2240.

450. On the nature of Salterella: Roy. Soc. Canada, Proc. and Trans., 3d ser., vol. 19, sec. 4, pp. 29-41, 2 pls., 1925.

451. The structure of the Levis formation at Levis, Quebec: Roy. Soc. Canada, Proc. and Trans., 3d ser., vol. 20, pt. 2, sec. 4, pp. 169–180, 3 figs., 1 pl. (map), 1926.

452. The graptolites of the Glenogle formation [British Columbia]: Canadian Field-Naturalist, vol. 40, no. 6, pp. 136–137, September, 1926.

Clarke, Frank Wigglesworth.

453. The internal heat of the earth: Sci. Am., vol. 134, pp. 370-371, 6 figs., June, 1926. Clarke, John Mason.

454. A colossal Devonian glass sponge: New York State Mus. Bull., no. 251, pp. 121–122, 2 pls., 1924.

455. Twentieth report of the director of the State Museum and science department: New York State Mus. Bull., no. 260, pp. 7-46, illus., 1925.

456. The age of the earth: World Almanac and Book of Facts, 1926, p. 87, New York, New York World, 1926.

Cleland, Herdman Fitzgerald.

457. Geology, physical and historical. 718 pp., 588 figs., New York, American Book Company 119251.

Clements, Frederic Edward.

458. (and Chaney, R. W.). Principles and methods in paleoecology; Carnegie Inst. Washington, Year Book no. 25, 1925–26, pp. 370–371, December, 1926.

Clifton, R. L. See also Wheeler, 2777.

459. Oil and gas in Oklahoma; Woods, Alfalfa, Harper, Major, Woodward, and Ellis counties: Oklahoma Geol. Survey, Bull. no. 40-A, 24 pp., 5 pls. (incl. map), June, 1926.

460. Stratigraphy of Whitehorse sandstone; formation extends from Clarke County, Kansas, through Oklahoma and into Panhandle area of Texas: Oil and Gas Jour., vol. 25, no. 2, pp. 70, 74, map, June 3, 1926.

Clute, Walker S.

461. Notes on the geology of Olinda field, California: Oil Bull., vol. 12, no. 9, pp. 954-955, 2 figs., September, 1926.

Cobb, Margaret Cameron.

462. The origin of corundum associated with dunite in western North Carolina. Dissertation, Bryn Mawr College, 43 pp., 7 pls., map, Bryn Mawr, Pennsylvania, 1924.

463. Desilicative genesis of commercial corundum: Pan-Am. Geologist, vol. 43, no. 4, pp. 257–264, May, 1925.

Cockerell, Theodore Dru Alison.

464. Plant and insect fossils from the Green River Eocene of Colorado: U. S. Nat. Mus., Proc., vol. 66, art. 19, 13 pp., 2 pls., February 16, 1925.

465. (and Custer, Clarence). A new fossil *Inocellia* (Neuroptera) from Florissant: Entomologist, vol. 58, pp. 295–297, 1 fig., December, 1925.

466. The supposed fossil *Ophioglossum* [O. hastatiforme, Eocene, Wyoming]: Torreya, vol. 26, no. 1, pp. 10–11, January-February, 1926.

467. A fossil orthopterous insect formerly referred to Mecoptera: Entomological Soc. Washington, Proc., vol. 28, no. 6, p. 142, June, 1926.

468. A Miocene *Orontium* (Araceae): Torreya, vol. 26, no. 4, p. 69, 1 fig., July-August, 1926.

469. Some Tertiary fossil insects: Ann. and Mag. Nat. Hist., 9th ser., vol. 18, pp. 313–324, 14 figs., October, 1926.

470. Hunting fossil insects: Sci. Am., vol. 135, pp. 264-265, October, 1926.

471. The antiquity of the Labiatae or mint family: Nature, vol. 118, p. 696, November 13, 1926.

472. An alga from the Eocene of Colorado: Torreya, vol. 26, no. 6, pp. 111–112, 1 fig., November–December, 1926.

Cockfield, William Egbert.

- 473. The silver-lead deposits of Beaver River district, Yukon; Canadian Min. Jour., vol. 46, no. 3, pp. 65-67, 1 fig., January 16, 1925.
- 474. Upper Beaver River area, Mayo district, Yukon: Canada, Geol. Survey, Summ. Rept., 1924, pt. A, pp. 1–18, 2 figs. 1 pl., map, 1925.
- 475. (and Bell, A. H.). Whitehorse district, Yukon: Canada, Geol. Survey, Mem. 150, 63 pp., 8 pls., map, 1926.
- 476. Silver-lead deposits in Atlin district, British Columbia: Canada, Geol. Survey, Summ. Rept., 1925, pt. A, pp. 15–24, 2 figs., 1926.
- 477. Explorations between Atlin and Telegraph Creek, British Columbia:
 Canada, Geol. Survey, Summ. Rept., 1925, pt. A, pp. 25–32, map,
 1926.

Cole, George E.

- 478. Gypsum in Ontario: Ontario Dept. Mines, 34th Ann. Rept., vol. 34, pt. 2, pp. 1–34, illus., 1925.
- 479. Gypsum in Ontario: Canadian Inst. Min. and Met., Bull., no. 154, pp. 148–162, February, 1925; Trans., vol. 28, pp. 194–208 [1926].

Cole, Lionel Heber.

- 480. Sodium sulphate of western Canada; occurrence. uses, and technology:
 Canada, Dept. Mines, Mines Branch, 160 pp., 16 figs., 15 pls., maps,
 1926. [Pub. no. 646.]
- 481. (and Eardley-Wilmot, V. L.). Lithium-bearing minerals in Canada:
 Canada, Dept. Mines, Mines Branch, Investigations of mineral
 resources and the mining industry, 1925, pp. 69-75, 1926.

Coleman, Arthur Philemon.

- 482. Late Paleozoic climates: Am. Jour. Sci., 5th ser., vol. 9, pp. 195-203, March, 1925.
- 483. The spacing of ice ages and early pre-Cambrian climates: Sci. Monthly, vol. 20, no. 5, pp. 473-475, May, 1925.
- 484. The Pleistocene rocks of the Toronto region [Ontario] (abstract): British Assoc. Adv. Sci., Rept. 92d Meeting, p. 379, 1925.
- 485. Raised beaches as related to the thickness of ice sheets (abstract):
 British Assoc. Adv. Sci., Rept. 92d Meeting, p. 385, 1925.
- 486. Pre-Cambrian climates (abstract): British Assoc. Adv. Sci., Rept. 92d Meeting, pp. 390–391, 1925.
- 487. Ice ages, recent and ancient. xiii, 296 pp., 51 figs., 8 maps, New York, The Macmillan Company, 1926.
- 488. The magmatic origin of the Sudbury nickel ores: Geol. Mag., vol. 63, pp. 108-112, March, 1926,
- 489. The Pleistocene of Newfoundland: Jour. Geology, vol. 34, no. 3, pp. 193-223, 4 figs., April-May, 1926.
- 490. The Sudbury ore deposits [Ontario]: Canadian Min. Jour., vol. 47, no. 46, pp. 1080-1081, November 12, 1926.

Collet, L. W. See Twenhofel, no. 2603.

Collier, Arthur James. See U. S. Geol. Survey, 2628.

Collingwood, Douglas Moore.

491. The Lytton Springs oil field, Caldwell County, Texas: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 10, pp. 953-975, 4 figs., 2 pls. (incl. maps), October, 1926.

Collins, George E.

492. Hydrocarbon veindikes and oil shales: Eng. and Min. Jour.-Press, vol. 119, no. 19, p. 773, May 9, 1925.

493. Genesis of sulphide ores: Eng. and Min. Jour.-Press, vol. 121, no. 9, p. 373, February 27, 1926.

Collins, R. Lee. See also Roberts, 2127. ACCI. doteld .suffi fill

494. A lower Eocene termite from Tennessee: Am. Jour. Sci., 5th ser., vol. 9, pp. 406-410, 7 figs., May, 1925.

Collins, William Dennis.

495. (and Howard, C. S.). Index of analyses of natural waters in the United States: U. S. Geol. Survey, Water-Supply Paper 560, pp. 53-85, May, 1925.

Collins, William Henry.

496. North shore of Lake Huron: Canada, Geol. Survey, Mem. 143, 160 pp., 9 figs., 17 pls., 3 maps., 1925. Extracts, with title, Ore deposits of the district north of Lake Huron, Ontario: Canadian Min. Jour., vol. 46, no. 50, pp. 1134–1136, December 11, no. 51, pp. 1154–1156, December 18, 1925, vol. 47, no. 3, pp. 54–56, January 15, no. 4, pp. 83–84, January 22, 1926.

497. [Annual report of the] Geological Survey: Canada, Dept. Mines, Report for the year ending March 31, 1924, pp. 9-33, 1925.

498. [Annual report of the] Geological Survey: Canada, Dept. Mines, Rept. for the year ending March 31, 1925, pp. 11-34, 1925.

499. Donaldson Bogart Dowling: Canadian Min. Jour., vol. 46, no. 24, pp. 581-582, portr., June 12, 1925; Canadian Inst. Min. and Met., Bull., no. 159, pp. 688-691, portr., July, 1925.

500. (and Quirke, T. T.). Michipicoten iron ranges: Canada, Geol. Survey, Mem. 147, pp. 1-141, 15 figs., 9 pls. (incl. maps), 1926. Extracts, with titles, The Helen iron ore deposits: Canadian Min. Jour., vol. 47, no. 27, pp. 666-670, 3 figs., July 2, 1926; and Pyrite deposits of Michipicoten district: Canadian Min. Jour., vol. 47, no. 28, pp. 685-688, July 9, 1926.

501. [Annual report of the] Geological Survey: Canada, Dept. Mines, Rept. for the year ending March 31, 1926, pp. 9-31, 1926.

502. Donaldson Bogart Dowling: Roy. Soc. Canada, Proc. and Trans., 3d ser., vol. 20, pp. iv-v, portr., 1926.

503. Field work of the Geological Survey [of Canada]: Canadian Min. Jour., vol. 47, no. 31, pp. 756-759, July 30, 1926.

Colony, Roy Jed. See also Lindgren, no. 1588.

504. Field work in the Schunemunk region during 1924: New York State Mus. Bull., no. 260, pp. 22–23, 1925.

505. Some problems in the Schunemunk area: New York State Mus. Bull., no. 267, pp. 26-29, 1926.

Colorado, State Board of Immigration.

506. Colorado, mineral, oil, and shale resources. 47 pp. [1925].

Conhaim, H. J. See Grout, 980.

Connolly, Joseph P. See also O'Harra, 1921.

507. Geology and mineralogy of the Keystone district [Pennington County, South Dakota]: Black Hills Engineer, vol. 13, no. 1, pp. 11-18, January, 1925.

Connolly, Joseph P.—Continued.

508. The Etta mine [Keystone district, South Dakota]: Black Hills Engineer, vol. 13, no. 1, pp. 18-23, 8 figs., January, 1925.

509. The geology class [of the South Dakota School of Mines] in the Badlands [of South Dakota]: Black Hills Engineer, vol. 14, no. 2, pp. 105–111, illus., March, 1926.

Cook, Charles W.

510. Molybdenite deposit near New Ross, Nova Scotia: Econ. Geology, vol. 20, no. 2, pp. 185–188, March-April, 1925.

511. Influence of joints in formation of island at western end of Lake Brie (abstract): Pan-Am. Geologist, vol. 44, no. 2, p. 152, September, 1925.

512. Fractionation of petroleum during capillary migration: Econ. Geology, vol. 20, no. 7, pp. 639-641, 1 fig., November, 1925.

Cook, Harold James. See also Abel, 3.

513. Manganese fulgurites: Nebraska State Mus., Bull 5, pp. 41–44, 2 figs., June, 1925.

514. Definite evidence of human artifacts in the American Pleistocene: Science, new ser., vol. 62, pp. 459–460, November 20, 1925.

515. A new genus of uintatheres from Colorado; Colorado Mus. Nat. Hist., Proc., vol. 6, no. 2, pp. 7-11, 5 pls., February 27, 1926.

516. New Eocene titanotheres from Moffat County, Colorado: Colorado Mus. Nat. Hist., Proc., vol. 6, no. 3, pp. 12-18, 11 pls., March 5, 1926.

517. A new gigantic fossil dog from Colorado: Colorado Mus. Nat. Hist., Proc., vol. 6, no. 5, pp. 29-31, 1 pl., April 16, 1926.

Cook, Le Moyne.

518. A rhinoceros bone bed [Agate, Nebraska]: Black Hills Engineer, vol. 14, no. 2, pp. 95–99, 3 figs., March, 1926.

Cooke, Charles Wythe. See also LaForge, 1513.

519. Recent contributions to the stratigraphy of the Coastal Plain of the United States: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 1, pp. 862-864 [1924].

520. Coastal terraces of Georgia (abstract): Washington Acad. Sci., Jour., vol. 15, no. 8, p. 184, April 19, 1925.

521. Coastal terraces of Georgia (abstract): Pan-Am. Geologist, vol. 43, no. 5, pp. 375–376, June, 1925.

522. Correlation of the Eocene formations in Mississippi and Alabama: U. S. Geol. Survey, Prof. Paper 140, pp. 133–136, December, 1925.

523. Geology of Alabama; The Cenozoic formations: Alabama, Geol. Survey, Spec. Rept. no. 14, pp. 251–297, 5 pls., 1926.

524. Correlation of the basal Cretaceous beds of the southeastern States:
U. S. Geol. Survey, Prof. Paper 140, pp. 137-139, January 12, 1926.

525. New Eocene mollusks from Jackson, Mississippi: Washington Acad. Sci., Jour., vol. 16, no. 5, pp. 132–138, 1 pl., March 4, 1926.

526. Fossil man and Pleistocene vertebrates in Florida: Am. Jour. Sci. 5th ser., vol. 12, pp. 441–452, November, 1926.

Cooke, Harold Caswell.

527. Progress of structural determinations in the Archean rocks of Ontario and Quebec: Roy. Soc. Canada, Proc. and Trans., 3d ser., vol. 19, pp. 1-19, 7 figs., 1925. Cooke, Harold Caswell-Continued.

528. Recent developments in northern Quebec: Canadian Inst. Min. and Met., Bull., no. 156, pp. 343–350, April, 1925.

529. "Between the Archean and Keweenawan is the Huronian": Roy. Soc. Canada, Proc. and Trans., 3d ser., vol. 20, sec. 4, pp. 17–37, 1 fig. 1926.

530. Recent developments in northwestern Quebec; Canadian Inst. Min. and Met., Bull., no. 169, pp. 627–640, 2 figs., May, 1926; Trans., vol. 29, pp. 237–250, 2 figs. [1927].

531. Ore deposits of the Rouyn area, Quebec: Canadian Min. Jour., vol. 47, no. 23, pp. 572–575, June 4, 1926.

Cooper, Chalmer Lewis. See also Shannon, no. 2292.

532. The Sycamore limestone: Oklahoma Geol. Survey, Circular no. 9, 26 pp., 4 figs., 4 pls., map, December, 1926.

Corbett, Clifton S.

533. Leverrierite as a schist-forming mineral; Am. Jour. Sci., 5th ser., vol. 10, pp. 247–268, 1 fig., September, 1925.

534. Another Kansas meteorite?: Am. Jour. Sci., 5th ser., vol. 12, pp. 495–498, 3 figs., December, 1926.

Corless, C. V. See Goodwin, 936; Mackenzie, 1675.

Corral, José Isaac.

535. Investigaciones sobre el petróleo en Cuba: Cuba, Dirección de montes y minas, Bol. minas, no. 8, pp. 1–11, August, 1925.

536. Informe sobre las canteras en la finca "La Viuda"; Cuba Dirección de montes y minas, Bol. minas, no. 9, pp. 1-5, 1926.

Coste, Eugene.

537. Natural gas and oil possibilities in Canada: Natural Gas, vol. 5, no. 1, pp. 24-25, 42, January, 1924.

Cottingham, Kenneth.

538. Outline of the general geology of Ohio as d'sclosed by deep drill tests:

Nat. Petroleum News, vol. 18, no. 32, pp. 45, 46, 48, 3 figs., August
11, 1926.

Cowie, George S. See MacLeod, 1679.

Crabb, E. D.

539. A fossil elephant of Oklahoma: Milwaukee, Public Mus., Yearbook. 1923, vol. 3, pp. 173–177, 3 figs., April 29, 1925.

Craig, Edward Hubert Cunningham.

540. Geophysical surveys as aids to the geologist: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 1, pp. 165–167, January–February, 1925.

541. On "kerogen": Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 1, p. 180, January-February, 1925.

Crane, Guy Walter.

542. Notes on the geology of East Tintic [Utah County, Utah]: Am. Inst.
Min. and Met. Eng., Trans. [preprint] no. 1491, 15 pp., 3 figs.,
September, 1925; discussion, no. 1512, pp. 11–13, December, 1925;
(with discussion), Trans., vol. 74, pp. 147–162, 3 figs., 1926; abstract, Mining and Metallurgy, vol. 6, no. 227, p. 571, November, 1925.

Crane, Walter Richard.

543. Red iron ores and ferruginous sandstones of the Clinton formation in the Birmingham district, Alabama: U. S., Bur. Mines, Tech. Paper 377, 41 pp., 23 figs., 1926.

Crawford, Arthur L.

544. Euhedral oligoclase of pericline habit from Medicine Bow Mountains, Wyoming: Am. Mineralogist, vol. 11, no. 9, pp. 239–246, 5 figs., September. 1926.

Crawford, Ralph Dixon.

545. (and Gibson, Russell). Geology and ore deposits of the Red Cliff district, Colorado: Colorado Geol. Survey, Bull. 30, 89 pp., 15 figs., 3 pls. (incl. map), 1925.

Creveling, J. G.

546. The peridotite of Presque Isle, Michigan; a study in serpentinization: Am. Jour. Sci., 5th ser., vol. 12, pp. 515-521, December, 1926.

Crickmay, Colin H. See also Hertlein, 1095.

547. The discovery of the prosiphon in Cretaceous ammonites from California, with remarks upon the function of the organ: Am. Jour. Sci., 5th ser., vol. 9, pp. 229–232, 3 figs., March, 1925.

548. A note on two of Hyatt's Liassic ammonites: California Acad. Sci., Proc., 4th ser., vol. 14, no. 3, pp. 77-81, 1 pl., July 23, 1925.

549. A Pleistocene fauna from the southwestern mainland of British Columbia: Canadian Field-Naturalist, vol. 39, no. 6, pp. 140-141, September, 1925.

Crider, Albert Foster.

550. Deep Pine Island gas [northern Louisiana]: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 1, pp. 171–172, January–February, 1925.

Croneis, Carey.

551. New cephalopods from the Fayetteville shale [of Arkansas]: Harvard Coll., Mus. Comp. Zoology, Bull., vol. 67, no. 10, pp. 341-352, 2 pls., February, 1926.

552. Notes on Cycloceras and associated genera: Am. Jour. Sci., 5th ser., vol. 12, pp. 185–192, September, 1926.

553. Unusual Carboniferous cephalopods: Science, new ser., vol. 64, pp. 622-623, December 24, 1926.

Crook, Alja Robinson.

554. Elephas primigenius boreus Hay at Golconda, Illinois: Illinois State Acad. Sci., Trans., vol. 19, pp. 288–299, 1 fig., 8 pls., 1926.

Crosby, Irving B. See also Crosby, 556.

555. The danger of earthquakes in New England: Science, new ser., vol. 63, pp. 186–187, February 12, 1926.

Crosby, William Otis.

556. (and Crosby, Irving B.). Keystone faults: Geol. Soc. America, Bull., vol. 36, no. 4, pp. 623-640, 1 fig., December, 1925.

Crouse, Charles Stevens.

557. The precious metal content of the black Devonian shales of Kentucky: Kentucky Geol. Survey, ser. 6, vol. 21, pp. 49-58, 1925.

558. An economic study of the black Devonian shales of Kentucky: Kentucky Geol. Survey, ser. 6, vol. 21, pp. 59-97, 4 figs., 1925. Crouse, Charles Stevens-Continued.

559. The intrastate industrial utilization of the mineral resources of Kentucky: Kentucky Geol. Survey, ser. 6, vol. 21, pp. 145-192, 1925.

560. Economic possibilities of eastern oil shales: Min. Congress Jour., vol. 12, no. 3, pp. 166–169, 5 figs., March, 1926.

Culbertson, J. Archer.

561. Fauna of the Brassfield limestone of Jefferson County, Indiana: Indiana Acad. Sci., Proc., vol. 35, pp. 111–119, 1 pl., 1926.

Culver, Harold E.

562. Preliminary report on coal stripping possibilities in Illinois: Illinois State Geol. Survey, Cooperative Min. Ser., Bull. 28, 61 pp., 22 figs., 1925.

563. Coal resources of District III (western Illinois): Illinois State Geol. Survey, Cooperative Min. Ser., Bull. 29, 128 pp., 14 figs., 2 maps, 1925.

564. Correlation of Illinois coals (abstract): Pan-Am. Geologist, vol. 45, no. 3, pp. 253-254, April, 1926.

Cumings, Edgar Roscoe.

565. The earth's framework [presidential address]: Indiana Acad. Sci., 41st Ann. Meeting, Proc., vol. 35, pp. 45-61, 1926.

Cunningham, George M.

566. The Wheeler Ridge oil field [Kern County, California]: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 5, pp. 495–501, 2 figs., May, 1926.

567. Were diatoms the chief source of California oil? (with discussion by Howard W. Kitson): Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 7, pp. 709-721, July, 1926.

Cushing, Henry Platt.

568. (and Newland, D. H.). Geology of the Gouverneur quadrangle: New York State Mus. Bull., no. 259, 122 pp., 16 figs., 14 pls., map, May, 1925.

Cushman, Joseph Augustine.

569. A new genus of Eocene Foraminifera: U. S. Nat. Mus., Proc., vol. 66, art. 30, 4 pp., 1 fig., 2 pls., January 23, 1925.

570. The genera Pseudotextularia and Gwembelina: Washington Acad. Sci. Jour., vol. 15, no. 6, pp. 133-134, March 19, 1925.

571. An Eocene fauna from the Moctezuma River, Mexico: Am. Assoc. Petro-leum Geologists, Bull., vol. 9, no. 2, pp. 298-303, 3 pls., March-April, 1925.

572. Contributions from the Cushman Laboratory for Foraminiferal Research. Sharon, Massachusetts.

Vol. 1, no. 1, April, 1925.

1. A new Cretaceous Uvigerina from Louisiana, p. 1.

 Three new species of Siphogenerina from the Miocene of California, pp. 2-3.

3. New Foraminifera from the upper Eocene of Mexico, pp. 4-8, 1 pl.

4. A new Uvigerina from the Vienna Basin, p. 10.

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 pl.

7. Apertural characters in *Cristellaria* with descriptions of a new species, pp. 24-25, 1 pl.

Cushman, Joseph Augustine-Continued.

572. Contributions from the Cushman Laboratory, etc.—Continued.

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- 8. Some Textulariidae from the Miocene of California, pp. 29-34, 1 pl.
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- 13. Notes on the genus Cassidulina, pp. 51-59, 2 pls.
- 14. Mexican species of Marginulina, pp. 61-62.
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 - 16. Eocene Foraminifera from the Cocoa sand of Alabama, pp. 65-69. 1 pl.

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- 17. The genus $\it Chilostomella$ and related genera, pp. 73–79, 1 pl. 18. Some fossil Bolivinas from Mexico, pp. 81–84, 1 pl.
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- 22. Photographing Foraminifera, pp. 1-3.
- 23. Eouvigerina, a new genus from the Cretaceous, pp. 3-6.
- 24. The genus Lamarckina and its American species, pp. 7-13, 1 pl. 25. Siphogenerina plummeri, a species from the upper Cretaceous of Texas, p. 15.
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Vol. 2, pt. 2, July, 1926.

- 27. Some new Foraminifera from the upper Eocene of the southeastern Coastal Plain of the United States, pp. 29-36, 2 pls.
- 28. (and Stewart, Roscoe E.). A new Plectofrondicularia from the Oligocene of California, p. 39.
 - 29. Some Pliocene Bolivinas from California, pp. 40-46, 1 pl.

Vol. 2, pt. 3, October, 1926,

- 30. Foraminifera of the typical Monterey of California, pp. 53-66, 3 pls.
- 31. The generic position of "Pulvinulina favus H. B. Brady," pp. 70-71.
- 32. Some phases of correlation by means of the Foraminifera, pp. 71-74.
- 573. An introduction to the morphology and classification of the Foraminifera: Smithsonian Misc. Coll., vol. 77, no. 4, 77 pp., 16 pls., July 21, 1925.
- 574. (and Applin, E. R.). Texas Jackson Foraminifera: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 2, pp. 154-189, 6 pls., February, 1926
- 575. Foraminifera of the genera Siphogenerina and Pavonina: U. S. Nat. Mus., Proc., vol. 67, art. 25, 24 pp., 6 pls., March 9, 1926.
- 576. The Foraminifera of the Velasco shale of the Tampico embayment [San Luis Potosi, Mexico]: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 6, pp. 581-612, 7 pls., June, 1926.

Custer, Clarence. See Cockerell, 465.

Dachnowski, Alfred Paul.

- 577. Profiles of peatlands within limits of extinct glacial lakes Agassiz and Wisconsin: Bot. Gazette, vol. 80, no. 4, pp. 345-366, 3 figs., December, 1925.
- 578. Profiles of peat deposits in New England: Ecology, vol. 7, no. 2, pp. 120-135, 2 figs., April, 1926.

Dake, Charles Laurence.

579. (and Brown, J. S.). Interpretation of topographic and geologic maps, with special reference to determination of structure. xi, 355 pp., 52 figs., New York, McGraw-Hill Book Company, 1925.

Dale, Nelson Clark.

580. Pre-Cambrian and Paleozoic geology of Fortune Bay, Newfoundland (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 155, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, p. 159, March, 1926.

Dall, William Healey.

581. Tertiary fossils dredged off the northeastern coast of North America:
Am. Jour. Sci., 5th ser., vol. 10, pp. 213–218, September, 1925.

Daly, Reginald Aldworth.

582. Relation of mountain building to igneous action: Am. Philos. Soc., Proc., vol. 64, no. 2, pp. 283–307, 3 figs., 1925; abstract, with title Mountain chain formation: Science, new ser., vol. 61, p. x, May 1, 1925.

583. Delevelings connected with glaciation and deglaciation (abstract): British Assoc. Adv. Sci., Rept. 92d Meeting, p. 384, 1925.

584. Pleistocene changes of level: Am. Jour. Sci., 5th ser., vol. 10, pp. 281-313, October, 1925.

585. (and Palache, Charles, and Mather, Kirtley F.). Jay Backus Woodworth: Science, new ser., vol. 62, pp. 450–451, November 20, 1925.

586. Our mobile earth. 342 pp., 187 figs., New York, Charles Scribner's Sons, 1926.

587. Jay Backus Woodworth: Seismological Soc. America, Bull., vol. 16, no. 1, pp. 43–44, March, 1926.

588. Earthquakes: Boston Soc. Nat. Hist., Bull., no. 39, pp. 9-13, April, 1926

Dane, Carl H. See U. S. Geol. Survey, no. 2630.

Dart, J. Doris. See Schuchert, 2267.

Darton, Nelson Horatio.

589. (and Paige, Sidney). Description of the central Black Hills [with contributions by J. D. Irving]: U. S. Geol. Survey, Geol. Atlas U. S., Central Black Hills folio (no. 219), 34 pp., 40 figs., 7 maps, section and 2 illustrations sheets, 1925.

590. Structural features of New Mexico and Arizona (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 163, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, p. 156, March, 1925.

591. Topographic and geologic maps of Arizona and New Mexico (abstract): Pan-Am. Geologist, vol. 43, no. 5, p. 364, June, 1925.

592. A résumé of Arizona geology: Arizona, Univ., Arizona Bur. Mines, Bull. no. 119 (geol. ser. no. 3), 298 pp., 105 figs. (incl. maps), 128 pls. (incl. maps), October 15, 1925.

593. Geology of the Guantánamo Basin, Cuba: Washington Acad. Sci., Jour., vol. 16, no. 12, pp. 324–333, 5 figs. (incl. map), June 19, 1926.

594. (and Reeside, J. B., jr.). Guadalupe group: Geol. Soc. America, Bull. vol. 37, no. 3, pp. 413–428, 4 figs., 6 pls. (incl. map), September 30, 1926; abstract, no. 1, pp. 155–156, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, p. 159, March, 1926.

595. The Permian of Arizona and New Mexico: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 9, pp. 819–852, 10 figs., September, 1926.

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Davies, D. James.

596. Mining and metallurgy in Newfoundland: Inst. Min. and Met., Bull., no. 243, 8 pp., December, 1924.

Davies, Stanley J.

597. Western Canada [petroleum in 1924]: Inst. Petroleum Technologists, Jour., vol. 11, no. 51, pp. 417-419, August, 1925.

Davis, Angus W.

598. British Columbia mineral survey district no. 3 and the Pacific Great Eastern Railway: Canadian Inst. Min. and Met., Bull., no. 160, pp. 809-811, August, 1925; Trans., vol. 28, pp. 398-400 [1926].

Davis, C. W.

599. The composition and age of uranium minerals from Katanga, South Dakota, and Utah: Am. Jour. Sci., 5th ser., vol. 11, pp. 201–217, March, 1926.

Davis, Darrell Haug.

600. The geography of the mountains of eastern Kentucky: Kentucky Geol. Survey, ser. 6, vol. 18, 180 pp., 21 figs., 57 pls., 1924.

Davis, Hubert W. See Burchard, 342, 343.

Davis, R. O. E. See Twenhofel, 2599, 2603.

Davis, Watson.

601. Notes on the Santa Barbara earthquake: Science, new ser., vol. 62, pp. x, xii, July 10, 1925.

602. Science Service and the location of earthquake epicenters: Seismol. Soc. America, Bull., vol. 16, no. 1, pp. 41–42, March, 1926; Science, new ser., vol. 63, p. 426, April 23, 1926.

603. (and Stockley, James). Seismology, the public, and Science Service (abstract): Seismol. Soc. America, Bull., vol. 16, no. 2, pp. 155–157, June, 1926.

Davis, William Morris.

604. Notes on coral reefs: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 2, pp. 1161–1163 [1924].

605. Modification of Darwin's theory of coral reefs by the glacial-control theory (abstract): British Assoc. Adv. Sci., Rept. 92d Meeting, pp. 384-385, 1925.

606. An up-tilted and beveled-off atoll (abstract); British Assoc. Adv. Sci., Rept. 92d Meeting, p. 385, 1925.

607. A Roxen lake in Canada [Lake Timiskaming]: Scottish Geog. Mag., vol. 41, no. 2, pp. 65-74, 2 figs., March 16, 1925.

608. The Basin Range problem: Nat. Acad. Sci., Proc., vol. 11, no. 7, pp. 387–392, 2 figs., July 15, 1925.

609. Laccoliths and sills (abstract with discussion); Washington Acad. Sci., Jour., vol. 15, no. 18, pp. 414-415, November 4, 1925; Bull. volcanologique, 2° ann., nos. 5-6, pp. 323-324, 1925.

610. Biographical memoir of Grove Karl Gilbert, 1843–1918; Nat. Acad. Sci., Mem., vol. 21, 5th mem., 303 pp., 18 figs. and pls. (incl. portraits). 1926.

611. The Lesser Antilles: Am. Geog. Soc., Map of Hispanic America, Pub no. 2, 207 pp., 66 figs., 16 pls., 1926.

612. Subsidence rate of reef-encircled islands: Nat. Acad. Sci., Proc., vol. 12, no. 2, pp. 99–105, 2 figs., February, 1926.

Davis, William Morris-Continued.

613. Classification of oceanic islands (abstract); Geol. Soc. America, Bull., vol. 37, no. 1, pp. 216–217, March 30, 1926.

614. Origin of the Lesser Antilles (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, pp. 220–221, March 30, 1926.

615. The value of outrageous geological hypotheses: Science, new ser., vol. 63, pp. 463–468, May 7, 1926.

Dawson, J. Chesley. 18321 TI and moved .24 34 34 ag 15 on

616. Oil shales: Canadian Inst. Min. and Met., Bull., no. 153, pp. 26–59, 4 figs., January, 1925.

Day, Arthur Louis.

617. (and Allen, E. T.). The volcanic activity and hot springs of Lassen Peak [California]. 190 pp., 81 figs., 13 pls., Carnegie Inst. Washington, Pub. no. 360, April, 1925.

618. The study of earth movements in California: Science, new ser., vol. 61, pp. 323-328, March 27, 1925.

619. Some causes of volcanic activity: Bull. volcanologique, 2^e ann., nos. 5–6, pp. 216–233, 1925; Smithsonian Inst., Ann. Rept., 1925, pp. 257–270, 3 pls., 1926.

620. Gases in volcanic activity (abstract with discussion): Washington Acad. Sci., Jour., vol. 15, no. 18, pp. 415-416, November 4, 1925; Bull. volcanologique, 2° ann., nos. 5-6, pp. 325-327, 1925.

621. [Report of the] Geophysical Laboratory: Carnegie Inst. Washington, Year Book no. 24, pp. 51-69, December, 1925.

622. (and others). Seismology; report of the advisory committee: Carnegie Inst. Washington, Year Book no. 24, pp. 370-380, December, 1925; Seismological Soc. America, Bull., vol. 16, no. 1, pp. 45-60, March, 1926.

623. Santa Barbara earthquake (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 143, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 1, p. 91, February. 1926.

624. Difficulties in the study of local earth movements: Washington Acad. Sci., Jour., vol. 16, no. 9, pp. 250-254, 1 fig., May 4, 1926.

625. [Report of the] Geophysical Laboratory: Carnegie Inst. Washington, Year Book no. 25, 1925-6, pp. 61-86, December, 1926.

626. (and others). Seismology; report of the advisory committee: Carnegie Inst. Washington, Year Book no. 25, 1925-6, pp. 415-435, December, 1926.

Dean, David. See Snow, 2387.

Decker, Charles Elijah.

627. Transverse structural features of Arbuckle Mountains [Oklahoma] (abstract): Pan-Am. Geologist, vol. 45, no. 3, pp. 254–255, April, 1926.

628. Transverse structures in Arbuckle Mountains of Oklahoma: Pan-Am. Geologist, vol. 46, no. 3, pp. 189-192, October, 1926.

Deeds, John F.

629. (and White, Walter N.). Water power and irrigation in the Madison River basin, Montana: U. S. Geol. Survey, Water-Supply Paper 560, pp. 1-30, 2 figs., January 26, 1925.

630. (and White, Walter N.). Water power and irrigation in the Jefferson River basin, Montana: U. S. Geol. Survey, Water-Supply Paper 580, pp. 41–113, map, December 14, 1926. 631. On the solar curve as dating the ice age, the New York moraine, and Niagara Falls through the Swedish time scale: Geografiska Annaler, Årg. 8, H. 4 (Stockholms Högskolas Geokronol. Inst., Data 9), pp. 253–284, 3 pls. 1926.

DeGolyer, Everette Lee.

- 632. The geologist and the petroleum industry: Nat. Petroleum News, vol. 16, no. 51, pp. 45, 46, 48, December 17, 1924; Oil Engineering and Finance, vol. 6, no. 105, pp. 24–26, January, 1925.
- 633. Discovery by geophysical methods of a new salt dome in the Gulf coast (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 161, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, March, 1925.
- 634. State geological surveys and economic geology: Econ. Geology, vol. 20, no. 4, pp. 376–381, June–July, 1925.
- 635. Discovery of potash salts and fossil algae in Texas salt dome [Markham, Texas]: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 2, pp. 348–349, March–April, 1925; Geology of salt dome oil fields, pp. 781–782, 1926.
- 636. Origin of North American salt domes: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 5, pp. 831-874, August, 1925; Geology of salt dome oil fields, pp. 1-44, 1926.
- 637. Geophysical methods in economic geology: Econ. Geology, vol. 21, no. 3 pp. 294-298, May, 1926.
- 638. (and others). Geology of salt dome oil fields; a symposium on the origin, structure, and general geology of salt domes, with special reference to oil production and treating chiefly the salt domes of North America. 797 pp., illus., published by American Association of Petroleum Geologists, 1923. [Reprint in book form of papers in volume 9 of the Bulletin.]

De Landero, Carlos F.

639. Correlación de las formaciones diatomíferas y los yacimientos de petróleo de Alta California: Bol. petróleo, vol. 19, no. 3, pp. 139-142, March, 1925.

De Lury, Justin Sarsfield.

- 640. An application of the theory of metallogenesis to the prospecting areas of Manitoba: Canadian Inst. Min. and Met.., Bull., no 162, pp. 931-940, October, 1925; Trans., vol. 28, pp. 358-370, 1 pl. [1926].
- 641. Wapawekka and Deschambault lakes area, Saskatchewan: Canada, Geol. Survey, Summ. Rept., 1924, pt. B, pp. 23–50, map (in two sheets), 1926.
- 642. Experiments with model glaciers: Jour. Geology, vol. 34, no. 3, pp. 266–274, 3 figs, April-May, 1926.
- 643. Pegmatites of southeastern Manitoba: Canadian Min. Jour., vol. 47, no. 28, pp. 695–697, July 9, 1926.

Denis, Théophile Constant.

- 644. Report on mining operations in the Province of Quebec during the year 1924: Quebec (Province), Dept. Colonization, Mines, and Fisheries, 170 pp., illus., 1925.
- 645. Report on mining operations in the Province of Quebec during the year 1925: Quebec (Province), Department of Colonization, Mines, and Fisheries, 198 pp., illus., 1926.

Denison, A. R.

646. Early Pennsylvanian sediments west of the Nemaha granite ridge, Kansas: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 6, p. 636, June, 1926.

De Silva, Luis.

647. El mineral de Mezquital del oro en el Estado de Zacatecas: Bol. minero, t. 20, no. 4, pp. 155-169, October, 1925.

Deussen, Alexander.

648. (and Lane, Laura Lee). Hockley salt dome, Harris County, Texas: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 7, pp. 1031-1060, 6 figs., 1 pl., October, 1925; Geology of salt dome oil fields, pp. 570-599, 6 figs., 1 pl., 1926.

DeWolf, Frank W.

649. (and Seashore, Paul T.). Diamond drilling near Kerens, Navarro County, Texas: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 7, pp. 703-708, 1 pl., July, 1926.

Dice, Lee Raymond.

650. Rodents and lagomorphs of the Rancho La Brea deposits [California]: Carnegie Inst. Washington, Pub. no. 349, pp. 119-130, 17 figs., August, 1925.

Dixon, Dorothy Elizabeth.

651. Bibliography of the geology of Oregon: Oregon, Univ., Pub., Geology ser., vol. 1, no. 1, 125 pp., June, 1926.

Dobbin, Carroll Edward. See Thom, 2531.

Dodd, Harold V.

652. Dominguez oil field: California State Min. Bur., Summary of Operations California Oil Fields, vol. 12, no. 4, pp. 7-20, 4 figs., 2 pls., October, 1926.

Dolmage, Victor.

653. Chilko Lake and vicinity, British Columbia: Canada, Geol. Survey, Summ. Rept., 1924, pt. A, pp. 59-75, 1 fig., 2 pls., map, 1925.

654. Tatla-Bella Coola area, Coast district, British Columbia: Canada, Geol. Survey, Summ. Rept., 1925, pt. A, pp. 155-163, map, 1926.

Donoghue, David.

655. The Bayou Bouillon salt dome, St. Martin Parish, Louisiana: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 9, pp. 1283-1289, 1 fig., December, 1925; Geology of salt dome oil fields, pp. 345-351, 1 fig.,

656. Section 28 salt dome, St. Martin Parish, Louisiana: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 9, pp. 1290-1293, 1 fig., December, 1925; Geology of salt dome oil fields, pp. 352-355, 1 fig., 1926.

Dorsey, George Edwin.

657. The origin of color of red beds: Jour. Geology, vol. 34, no. 2, pp. 131-143, February-March, 1926.

Dougherty, Ellsworth Y.

658. Mode of formation of the Porcupine quartz veins: Econ. Geology, vol. 20, no. 7, pp. 660-670, 2 pls., November, 1925.

Dougherty, Ellsworth Y .- Continued.

659. Formation of Porcupine quartz veins (discussion): Econ. Geology, vol. 21, no. 6, pp. 612-619, September, 1926.

 Replacement of aluminous rocks: Eng. and Min. Journ., vol. 122, no. 10, pp. 380–381, September 4, 1926.

Douglas, C. B. E.

661. Banding around rock fragments: Eng. and Min. Jour., vol. 122, no. 18, p. 700, October 30, 1926.

Douglas, G. Vibert.

662. The Whiskey Lake area, District of Algoma: Ontario Dept. Mines, 34th Ann. Rept., vol. 34, pt. 4, pp. 34-49, illus., map, 1926.

663. La Coche area, District of Sudbury: Ontario Dept. Mines, 34th Ann. Rept., vol. 34, pt. 4, pp. 50-51, map, 1926.

664. Reconnaissance from Red Lake to Favourable Lake, District of Patricia:
Ontario Dept. Mines, 35th Ann. Rept., vol. 35, pt. 4, 1925, 28 pp.,
21 figs., 2 maps, 1926.

Douvillé, Henri.

665. Revision des lépidocyclines: Soc. géol. France, Mém., new ser., t. I, mém. no. 2, 49 pp., 47 figs., 2 pls., 1924.

Dowell, Norah E.

666. Laboratory tests of water-bearing materials (abstract): Pan-Am. Geologist, vol. 44, no. 1, pp. 77–78, August, 1925.

Dowling, Donaldson Bogart.

667. The rocks of the plains. In Oil and gas in western Canada, compiled under the direction of the Superintendent Natural Resources Intelligence Branch, Dept. Interior, Canada, pp. 10-15, 2 figs., 1920.

Doxsee, W. W.

668. The location of epicenters, 1921: Canada, Dominion Observatory, Ottawa, Pub., vol. 7, no. 2, pp. 61–78, 1925.

669. The location of epicenters, 1922: Canada, Dominion Observatory, Ottawa, Pub., vol. 7, no. 3, pp. 81-102, 1926.

Drane, Brent S.

670. Biennial report of the State geologist and director, 1923–1924: North Carolina Geol. and Econ. Survey, 65 pp., 1925.

671. (and Stuckey, Jasper L.). The mineral industry in North Carolina from 1918–1923 (inclusive): North Carolina Geol. and Econ. Survey, Econ. Paper no. 55, 104 pp., 1925.

Draper, L. L.

672. Genesis of sulphide ores: Eng. and Min. Jour.-Press, vol. 121, no. 11, pp. 449–450, March 13, 1926.

Dreher, Otto.

673. The files of the oil geologist: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 2, pp. 331-339, 6 figs., March-April, 1925.

Dresser, John Alexander.

674. The Magog conglomerate; a horizon mark in the "Quebec group"; Roy. Soc. Canada, Proc. and Trans., 3d ser., vol. 19, sec. 4, pp. 115–121, 1925.

Duce, James Terry.

675. Geology of parts of Las Animas, Otero, and Bent counties: Colorado Geol. Survey, Bull. 27, pt. 3, pp. 73-102, 2 figs., map, 1924.

Dufresne, A. O.

676. Notes on some of the gold deposits in Temiscamingue and Abitibi counties: Quebec, Dept. Colonization . . . Report on Mining Operations . . . 1924, pp. 42–78, 3 pls., 3 figs. (maps), 1925.

677. Mineral deposits of western Quebec and their development in 1925: Quebec, Dept. Colonization . . . Report on Mining Operations . . . 1925, pp. 99-153, 1926.

678. Recent mineral discoveries in western Quebec: Canadian Inst. Min. and Met., Bull., no. 169, pp. 610–626, 1 fig., map. May, 1926; Canadian Min. Jour., vol. 47, no. 23, pp. 569–571, 1 fig., June 4, 1926.

679. Copper and zinc deposits of western Quebec: Canadian Min. Jour., vol. 47, no. 33, pp. 793-798, 4 figs., August 13, 1926.

Dunbar, Carl Owen.

680. Olenellus with antennules (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 229, March 30, 1925.

681. Antennae in Olenellus getzi n. sp.: Am. Jour. Sci., 5th ser., vol. 9, pp. 303-308, 2 figs., April, 1925.

Dunlop, J. P.

682. Gold and silver in 1923 (general report): U. S. Geol. Survey. Mineral Resources, 1923, pt. 1, pp. 549-585, 1 fig., 1 pl., April 6, 1925.

683. Gold, silver, copper, lead, and zinc in the Eastern States in 1924 (mine report): U. S. Geol. Survey, Mineral Resources, 1924, pt. 1, pp. 1–6, June, 1925.

Dupare, Louis.

684. Sur les gisements platinifères du Wyoming: Soc. phys. et d'hist. nat. de Genève, Compt. rend. des séances, vol. 41, no. 2, pp. 102-104, April-July, 1924.

Du Rietz, T. A.

685. The deformation of the pre-Cambrian peneplain of North America: Geol. Fören, Stockholm Förhandl., Bd. 47, H. 2, pp. 250–257, map, March-April, 1925.

Dutton, Clarence Edward.

686. On some of the greater problems of physical geology: Washington Acad. Sci., Jour., vol. 15, no. 15, pp. 359–369, August 19, 1925. (Reprinted from Philos. Soc. Washington, Bull., vol. 11, pp. 51–64, 1889.)

Dyer, William Spafford.

687. The paleontology of the Credit River section [Ontario]: Ontario Dept. Mines, 32d Ann. Rept., vol. 32, pt. 7, pp. 47–88, 7 pls., 1925.

688. The stratigraphy and paleontology of Toronto and vicinity, Part VI; Stratigraphy and correlation of the Credit River section: Ontario Dept. Mines, 32d Ann. Rept., vol. 32, pt. 7, pp. 117–134, 2 figs., 1925.

689. Geology of the gypsum deposits of southwestern Ontario: Ontario Dept Mines, 34th Ann. Rept., vol. 34, pt. 2, pp. 35–58, 6 figs., 1925.

690. Bore hole records and their use in determination of favorable structure for natural gas accumulation: Intercolonial Gas Jour. of Canada, vol. 18, no. 2, pp. 64-66, 5 figs., February, 1925.

ZAKEAD ANS

Dyer, William Spafford-Continued.

691. Oil and gas horizons in Ontario: Canadian Min. Jour., vol. 46, no. 20, pp. 494–496, May 15, 1925.

692. Minto coal basin, New Brunswick: Canada, Geol. Survey, Mem. 151, 42 pp., 3 figs., 2 maps, 1926.

Eakle, Arthur Starr.

693. Foshagite, a new silicate from Crestmore, California: Am. Mineralogist, vol. 10, no. 4, pp. 97–99, April, 1925.

694. Camsellite from California: Am. Mineralogist, vol. 10, no. 4, pp. 100–102, April, 1925.

695. Needed extension in mineralogic instruction: Am. Mineralogist, vol. 11, no. 3, pp. 45-52, March, 1926.

Eardley-Wilmot, V. L. See also Cole, 481.

696. Molybdenum; metallurgy and uses and the occurrence, mining, and concentration of its ores: Canada, Dept. Mines, Mines Branch, 202 pp., 55 figs., 11 maps, 1925. [Pub. no. 592.]

Earle, Kenneth W. A and down a warmed a salarane and salarane and control of the control of the

697. Reports on the geology of St. Kitts-Nevis, British West Indies, and the geology of Anguilla, British West Indies. 50 pp., published by the Crown Agents for the Colonies, London [n. d., 1923?].

Eaton, Harry Nelson. See also Miller, no. 1789.

698. Structural relations of the igneous rocks of the Wamsutta red beds,
Massachusetts (abstract): Geol. Soc. America, Bull., vol. 36, no. 1,
pp. 165-166, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, p.
157. March, 1925.

699. Geological excursion of New York State colleges: Science, new ser., vol. 62, pp. 431–432, November 13, 1925.

Eaton, J. E.

700. The Ventura oil field, California; a brief review of its stratigraphy and structure: Oil Bull., vol. 12, no. 5, pp. 521-524, 2 figs., May, 1926.

701. A contribution to the geology of Los Angeles Basin, California: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 8, pp. 753-767, 2 figs. (map and sections), August, 1926; Oil Bull., vol. 12, no. 9, pp. 970-977, 1037, 2 figs., September, 1926.

702. Geology and oil fields of Ventura Basin, Ventura County, California: Oil Age, vol. 23, no. 11, pp. 16–18, map, November, 1926.

Eby, James Brian.

703. Contact metamorphism of some Colorado coals: Am. Inst. Min. and Met. Eng., Trans. [preprint], no. 1401, 5 pp., 2 figs., January, 1925; Trans., vol. 71, pp. 246–252, 1925; abstract, Mining and Metallurgy, vol. 6, no. 328, p. 620, December, 1925.

704. (and Campbell, M. R.). The Virginia coal fields: U. S. Bur. Mines, Tech. Paper 365, pp. 1-5, 1926.

Eddington, A. S.

705. The borderland of astronomy and geology: Smithsonian Inst., Ann. Rept. 1923, pp. 195–202, 1925.

Edson, Fanny Carter.

706. Criteria for the recognition of heavy minerals occurring in the Mid-Continent field: Oklahoma Geol. Survey, Bull. no. 31, 32 pp., 2 pls., December, 1925. Edwards, Ira.

707. A visit to the petrified forests of Arizona: Milwaukee, Public Mus., Yearbook, 1923, vol. 3, pp. 164–170, 5 figs., April 29, 1925.

708. The sea caves of Devil's Island: Milwaukee, Public Mus., Yearbook, 1924, vol. 4, pp. 94-98, 4 figs., October 9, 1926.

709. The new geological groups [in the Public Museum of the City of Milwaukee]: Milwaukee, Public Mus., Yearbook, 1924, vol. 4, pp. 122–129, 5 figs., October 9, 1926.

Ehlers, George Marion.

710. An Ordovician reef on Sulphur Island, Lake Huron: Michigan Acad. Sc., Arts and Letters, Papers, vol. 4, pt. 1, pp. 425–429, 1 fig., 3 pls., February, 1925.

711. Two new crinoids from the Devonian of Michigan: Michigan, Univ., Mus. Geology, Contr., vol. 2, no. 6, pp. 99–104, 1 pl., June 3, 1925; abstract, Pan-Am. Geologist, vol. 44, no. 2, p. 160, September, 1925.

712. (and Chang, M. S.). New brachiopods from Mississippian rocks of Kentucky (abstract): Pan-Am. Geologist, vol. 44, no. 2, p. 160, September, 1925.

713. (and Chang, M. S.). New brachiopods from the Warsaw formation of Wayne County, Kentucky: Michigan, Univ., Mus. Geology, Contr., vol. 2, no. 7, pp. 105-110, 1 pl., July 15, 1926.

Ehrenberg, Kurt.

714. The crinoid occurrence at Crawfordsville, Indiana: Am. Mus. Novitates, no. 204, 12 pp., 2 figs., December 24, 1925.

Ekblaw, George E.

715. Paleozoic karst topography: Illinois State Acad. Sci., Trans., vol. 17, pp. 208–212, 1925.

716. Post-Chester, pre-Pennsylvanian faulting in the Alto Pass area: Illinois State Acad. Sci., Trans., vol. 18, pp. 378–382, 1 fig., 1925.

717. (and Athy, L. F.). Glacial Kankakee torrent in northeastern Illinois: Geol. Soc. America, Bull., vol. 36, no. 2, pp. 417-427, 4 figs., June 30, 1925; abstract, no. 1, p. 155, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, p. 151, March, 1925.

Eldridge, W. J. See Robinson, 2131.

Ellis, E. E. dennal continued the the March Mines Mines Branch of the Hellis, E. E.

718. Occurrence of commercial zinc and lead ore bodies in the Tri-State district: Eng. and Min. Jour.-Press, vol. 121, no. 5, pp. 209-210, January 30, 1926.

Ellis, Ernest W. See Kirkham, 1486.

Ellis, R. W.

719. Geologic map of the State of New Mexico. Scale, 1 inch=12 miles. State University of New Mexico, Albuquerque, 1925.

Ellisor, Alva Christine. See also Applin, 66.

720. The age and correlation of the chalk at White Cliffs, Arkansas, with notes on the subsurface correlations of northeast Texas: Am.

Assoc. Petroleum Geologists, Bull., vol. 9, no. 8, pp. 1152–1164, 2 pls., November, 1925.

721. Coral reefs in the Oligocene of Texas: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 10, pp. 976-985, 4 figs., October, 1926. Ells, Sydney Clarke.

 Oil shales of Canada. In McKee, Ralph H., Shale oil., pp. 43-60, New York, 1925.

723. Bituminous sands of northern Alberta; occurrence and economic possibilities; report on investigations to the end of 1924: Canada, Dept. Mines, Mines Branch, 244 pp., 47 figs., 43 pls., 12 maps and sections, 1926.

Ellsworth, H. V.

724. Canadian pegmatites and their minerals: Canadian Min. Jour., vol. 46, no. 9, pp. 224-226, February 27, 1925.

725. Radioactive minerals as geological age indicators: Am. Jour. Sci., 5th ser., vol. 9, pp. 127–144, February, 1925; abstract, British Assoc. Adv. Sci., Rept. 92d Meeting, p. 390, 1925.

726. Duration of pre-Cambrian time: Pan-Am. Geologist, vol. 43, no. 2, pp. 99-104. March, 1925.

727. Chemistry of the potash-bearing horizon of the Malagash salt deposit, Nova Scotia: Canada, Geol. Survey, Summ. Rept., 1924, pt. C, pp. 181–198, 1926.

728. (and Walker, John F.). Knopite and magnetite occurrence, southeastern British Columbia: Canada, Geol. Survey, Summ. Rept., 1925, pt. A, pp. 230-232, 1926.

729. Euxenite-polycrase from Mattawan township, Nipissing district, Ontario:
Am. Mineralogist, vol. 11, no. 12, pp. 329-331, December, 1926.

730. Toddite, a new uranium mineral from Sudbury district, Ontario: Am. Mineralogist, vol. 11, no. 12, pp. 332-334, December, 1926.

Elmore, Clarence J.

731. The diatoms (Bacillarioideae) of Nebraska: Nebraska Geol. Survey, vol. 8, 214 pp., 23 pls. [no date, 1926?].

Elworthy, Reginald Thomas.

732. New development in the Turner Valley oil field, Alberta: Inst. Petroleum Technologists, Jour., vol. 11, no. 49, pp. 200-201, April, 1925.

733. Natural gas and petroleum in northern Alberta: Canada, Dept. Mines, Mines Branch, Investigations of Mineral Resources . . . 1924, pp. 103-115, 1926.

734. Helium in Canada: Canada, Dept. Mines, Mines Branch, 64 pp., 2 pls., 2 maps, 1926. [No. 679.]

735. Hot springs in western Canada; their radioactive and chemical properties: Canada, Dept. Mines, Mines Branch, Investigations of mineral resources and the mining industry, 1925, pp. 1–33, 1926.

736. Natural gas in New Brunswick: Canada, Dept. Mines, Mines Branch, Investigations of mineral resources and the mining industry, 1925, pp. 34–38, 1926.

Emerson, O. H. See also Finch. 801.

737. The formation of aa and pahoehoe: Am. Jour. Sci., 5th ser., vol. 12, pp. 109-114, August, 1926.

Emmens, Newton W.

738. The Wainwright oil and gas field [Alberta]: Canadian Min. Jour., vol. 46, no. 5, pp. 120–124, no. 6, pp. 145–150, 10 figs., January 30, and February 6, 1925.

Emmens, Newton W.—Continued.

739. Mineral resources of the Lardeau and Trout Lake mining divisions of British Columbia: Canadian Min. Jour., vol. 47, no. 1, pp. 5-8, 3 figs., January 1, no. 2, pp. 36-38, 2 figs., January 8, 1926.

Emmons, R. C. See also Winchell, 2853.

740. Concerning inclusions in igneous magmas: Jour. Geology, vol. 34, no. 5, pp. 422-428, July-August, 1926.

741. (and Stockwell, C. H., and Jones, R. H. B.). Argentite and acanthite: Am. Mineralogist, vol. 11, no. 12, pp. 326-328, 1 fig., December,

Emmons, William Harvey. See also Lindgren, 1588.

742. The major hinge zone of Tertiary deformation and some of its precious metal deposits: International Geol. Cong., 13th Sess., Belgium, 1922, fasc. 3, pp. 1521-1532, 1925.

743. (and Laney, F. B.). Geology and ore deposits of the Ducktown mining district, Tennessee (with the active collaboration of Arthur Keith): U. S. Geol. Survey, Prof. Paper 139, 114 pp., 15 figs., 42 pls. (incl. map), 1926.

744. Relations of metalliferous lode systems to igneous intrusives: Am. Inst. Min. and Met. Eng., Pam. no. 1571, 42 pp., 23 figs., June, 1926; Trans., vol. 74, pp. 29-70, 23 figs., 1926; abstract, Mining and Metallurgy, vol. 7, no. 234, p. 263, June, 1926.

Engineering and Mining Journal-Press.

745. Development of the ore magma theory: Eng. and Min. Jour.-Press, vol. 119, no. 22, pp. 874-875, May 30, 1925.

746. The ghost of the molten magma: Eng. and Min. Jour.-Press, vol. 120, no. 9, p. 322, August 29, 1925.

747. The natural history of the pegmatites: Eng. and Min. Jour.-Press, vol. 120, no. 11, pp. 402-403, September 12, 1925.

748. Mining for shooting stars [Meteor Crater, Arizona]: Eng. and Min. Jour. Press, vol. 120, no. 26, pp. 1001-1002, December 26, 1925.

749. Ore deposition or ore injection: Eng. and Min. Jour-Press, vol. 121, no. 12, p. 475, March 20, 1926.

750. Essentials of the ore magma theory: Eng. and Min. Jour.-Press, vol. 121, no. 16, pp. 634-635, April 17, 1926.

751. Ore deposition in the Tri-State district: Eng. and Min. Jour.-Press, vol. 121, no. 23, p. 913, June 5, 1926.

English, Walter Atheling.

752. Geology and oil resources of the Puente Hills region, southern California: U. S. Geol. Survey, Bull. 768, 110 pp., 3 figs., 14 pls. (incl. maps), 1926.

Erlenborn, W.

753. Report on the feldspar deposits of Quetachou Manicouagan Bay: Quebec, Dept. Colonization ..., Report on Mining Operations ... 1924, pp. 93-111, 2 pls. (incl. map), 1925.

Esarey, Ralph E.

754. Notes on the relation of the Mt. Carmel and Heltonville faults to the Dennison anticline [Lawrence County]: Indiana Acad. Sci., Proc., vol. 34, pp. 135–139, 1925.

Estabrook, Edward L.

755. Analyses of Wyoming oil field waters: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 2, pp. 235-246, 3 figs., March-April, 1925.

756. (and Rader, Clarence M.). History of production of Salt Creek oil field, Wyoming: Am. Inst. Min. and Met. Eng., Trans. [preprint], no. 1503, 51 pp., 8 figs., September, 1925; (with discussion), [preprint], no. 1570 (Petroleum development and technology in 1925), pp. 199–254, 8 figs., April, 1926.

Ettlinger, I. A. See Short, 2321.

Evans, Isabel P. See Merrill, 1773.

Evans, John W.

757. Isostasy and geological structure (abstract): Pan-American Geologist, vol. 44, no. 4, pp. 329-330, November, 1925.

758. Continental drift (abstract): Pan-Am. Geologist, vol. 44, no. 4, pp. 332-333, November, 1925.

Everit, R. S.

759. Hot spring water from Clifton, Arizona: Econ. Geology, vol. 20, no. 3, pp. 291-292, May, 1925.

Eyl, W. C. See Kentucky Geol. Survey, 1364.

Fairbanks, Ernest E.

760. Angular inclusions and replacement deposits: Econ. Geology, vol. 20, no. 3, pp. 293-295, May, 1925.

761. A modification of Lemberg's staining method: Am. Mineralogist, vol. 10, no. 5, pp. 126-127, May, 1925.

762. The form of replacement crystals: Am. Mineralogist, vol. 10, no. 7, pp. 163-166, July, 1925.

763. The mechanism of replacement and recrystallization; Econ. Geology, vol. 20, no. 5, pp. 470-484, 1 fig., August, 1925.

764. Dumortierite from Nevada: Am. Mineralogist, vol. 11, no. 4, pp. 93-96. April, p. 135, May, 1926.

765. Electrical conductivity of ore minerals (discussion): Econ. Geology, vol. 21, no. 4, pp. 399-401, June-July, 1926.

766. Zeophyllite from Idaho, with note on the determination of Mallard's constant: Am. Mineralogist, vol. 11, no. 9, pp. 249-252, September, 1926.

Fairchild, Herman LeRoy. 767. Geologic history of the Genesee country. In History of the Genesee country (western New York), edited by Lockwood R. Doty, vol. 1, pp. 15-110, 37 pls., Chicago, The S. J. Clarke Publishing Company, 1925. Another edition with title, Geology of western New York, 62 pp., 37 pls., Published by the author, Rochester, New York, November,

768. The Susquehanna River in New York and evolution of western New York drainage: New York State Mus. Bull., no. 256, 99 pp., 10 figs., 39 pls., 1925.

769. Changing levels of the Great Lakes: Sci. Monthly, vol. 22, no. 3, pp. 193-199, March, 1926.

770. Pleistocene features of southern New England: Science, new ser., vol. 63, pp. 260-262, March 5, 1926.

771. The Mendon kame area: Rochester Acad. Sci., Proc., vol. 6, no. 6, pp. 195-215, 8 figs., 4 pls., August, 1926.

Fairchild, Herman LeRoy-Continued.

772. Geologic romance of the Finger Lakes: Sci. Monthly, vol. 23, no. 2, pp. 161-173, 10 figs., August, 1926.

773. The Dansville Valley and drainage history of western New York: Rochester Acad. Sci., Proc., vol. 6, no. 7, pp. 217-242, 9 figs., 8 pls., October, 1926.

774. Our world in the making: Science, new ser., vol. 64, pp. 365-371, October 15, 1926.

Farnsworth, Marie. See Bowles, 250. ountles, New Mexico; New Mexico, State

Fath, Arthur Earl.

775. Geology of the Bristow quadrangle, Creek County, Oklahoma, with reference to petroleum and natural gas: U. S. Geol. Survey, Bull. 759, 63 pp., 3 figs., 13 pls. (incl. maps), 1925.

Fay, Albert Hill.

776. The Illinois-Kentucky fluorspar industry: Eng. and Min. Jour., vol. 122, no. 5, pp. 165-169, 10 figs., July 31, 1926.

Fearing, J. L., jr.

777. (and Benedict, P. C.). Geology of the Verde Central mine [Jerome district, Arizona]: Eng. and Min. Jour.-Press, vol. 119, no. 15, pp. 609-611, 4 figs., April 11, 1925.

778. Some notes on the geology of the Jerome district, Arizona: Econ. Geology, vol. 21, no. 8, pp. 757-773, 5 figs., December, 1926.

Feiss, J. W.

779. Casting invertebrate fossils in sealing wax and type metal (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 235, March 30, 1926.

Fellman, Carl M.

780. The mining of fluorspar and its uses: Lake Superior Min. Inst., Proc., vol. 25, pp. 197-211, 8 figs., 1926.

Fenneman, Nevin Melanchthon.

781. A classification of natural resources: Science, new ser., vol. 61, pp. 191-197, February 20, 1925.

Fenner, Clarence Norman.

782. Earth movements accompanying the Katmai eruption: Jour. Geology, vol. 33, no. 2, pp. 116-139, February-March, no. 3, pp. 193-233, 18 figs., April-May, 1925.

783. The Katmai magmatic province: Jour. Geology, vol. 35, no. 7, pt. 2, pp. 673-772, 15 figs., October-November, 1926,

784. An unusual occurrence of albite [Paterson, New Jersey]: Am. Mineralogist, vol. 11, no. 10, pp. 255-259, 1 fig., October, 1926.

Ferguson, Henry Gardiner.

785. Late Tertiary and Pleistocene faulting in western Nevada (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 164, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, pp. 163-164, March, 1926.

Fettke, Charles Reinhard.

786. (and Hill, E. G.). Vanport limestone of Butler and southern Venango counties: Pennsylvania Geol. Survey, 4th ser., Bull. M7, pp. 282-292, 1925.

Fettke, Charles Reinhard-Continued.

787. Note on a calcified log from the Pittsburgh coal near Morgantown, West Virginia: Am. Mineralogist, vol. 10, no. 5, pp. 109-112, 3 figs., May, 1925.

788. Preliminary note on a calcified log from the Pittsburgh coal near Morgantown, West Virginia: Pennsylvania Acad. Sci., Proc., vol. 1, pp. 66-68, 2 pls., 1926.

Fiedler, Albert G.

789. Report on investigations of the Roswell artesian basin, Chaves and Eddy counties, New Mexico: New Mexico, State Engineer, 7th Bienn. Rept., pp. 21-60, 10 pls. [1926].

Fieldner, Arno Carl.

790. (and others). Analyses of mine samples [of Pennsylvania coals]: Pennsylvania Geol. Survey, 4th ser., Bull. M6, pt. 4, pp. 13–256, 1925.

791. (and others). Analyses of Alabama coals: U. S., Bur. Mines, Tech. Paper 347, pp. 12-107, 1925.

792. (and others). Analyses of mine samples [of coals in Utah]: U. S., Bur. Mines, Tech. Paper 345, pp. 23-85, 1925.

793. (and others). Analyses of mine samples [of Tennessee coals]: U. S., Bur. Mines, Tech. Paper 356, 94 pp., 1926.

794. (and others). Analyses of Virginia coals: U. S., Bur. Mines, Tech. Paper 365, pp. 8-69, 1926.

795. (and others). Analyses of Missouri coals: U. S., Bur. Mines., Tech. Paper 366, pp. 8-37, 1926.

Fillman, Louise.

796. Cenozoic history of the northern Black Hills of South Dakota (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 172, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, pp. 167–168, March, 1926.

Finch, John Wellington.

797. Platinum discoveries in Wyoming [Encampment district]: Eng. and Min. Jour.-Press, vol. 120, no. 3, pp. 95-96, 1 fig., July 18, 1925.

Finch, R. H.

798. On the prediction of tidal waves: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 2, pp. 1366-1368 [1924].

799. An earthquake prediction at Hawaiian Volcano Observatory: Science, new ser., vol. 61, pp. 42-43, January 9, 1925.

800. The earthquakes at Kapoho, Island of Hawaii, April, 1924: Seismological Soc. America, Bull., vol. 15, no. 2, pp. 122–127, 2 figs., June, 1925.

801. (and Emerson, O. H.). Sulphate deposits in lava tubes: Am. Jour. Sci., 5th ser., vol. 10, pp. 39-40, July, 1925.

802. Expedition to the southwest rift of Mauna Loa: Hawaiian Volcano Observatory, Monthly Bull., vol. 13, no. 12, pp. 89-91, December, 1925.

803. New York City an aseismic area: Science, new ser., vol. 64, p. 183, August 20, 1926.

Finley, F. L.

804. Kamiskotia gold area, District of Cochrane: Ontario Dept. Mines, 34th Ann. Rept., vol. 34, pt. 6, pp. 43-64, illus., map, 1925. Fisher, Cassius Asa.

805. Salt Creek oil field, Wyoming: Mining and Metallurgy, vol. 6, no. 222, pp. 279-284, 5 figs., June, 1925.

Fisher, Daniel Jerome.

- 806. Geology and mineral resources of the Joliet quadrangle: Illinois State Geol. Survey, Bull. no. 51, 160 pp., 47 figs., 6 pls. (incl. maps), 1925.
- 807. Structure of Herrin (No. 6) coal seam near Duquoin: Illinois State Geol. Survey, Rept. of Investigations no. 5, 34 pp. 15 figs., 2 pls., 1925.

Fisher, Lloyd W.

- 808. (and Simons, F. L.). Applications of colloid chemistry to mineralogy;
 Part I, Preliminary report: Am. Mineralogist, vol. 11, no. 5, pp.
 124-130, 4 figs., May, 1926.
- 809. (and Gedney, Edwin K.). Notes on the mineral localities of Rhode Island; I, Providence County: Am. Mineralogist, vol. 11, no. 12, pp. 334-340, December, 1926.

Flint, Richard Foster.

- 810. (and Ball, John R.). Revision of the Silurian of southeastern Missouri: Jour. Geology, vol. 34, no. 3, pp. 248-256, April-May, 1926; abstract, Geol. Soc. America, Bull., vol. 37, no. 1, p. 243, March 30, 1926.
- 811. Thrust faults in southeastern Missouri: Am. Jour. Sci., 5th ser., vol. 12, pp. 37–40, 2 figs., July, 1926.

Flores, Teodoro.

- 812. Informes preliminares de algunas de las zonas mineras situadas al este y oeste del ferrocarril Sud-Pacífico de México en el Estado de Sonora y de las minas de grafito en el región de Moradillas del mismo estado: Mexico, Departamento de exploraciones y estudios geológicos, Folleto de divulgación, no. 13, 20 pp., map, September, 1925.
- 813. Estudio geológico de la zona minera comprendida entre los minerales de Atotonilco el Chico y Zimapán, en el Estado de Hidalgo: Mexico, Inst. geol., Bol. 43, 159, pp., 35 pls., 1924 [1926?].
- 814. Informe preliminar acerca de algunas zonas mineralizadas vecinas á la vía del Sud-Pacífico de México, entre las estaciones Carbó y Santa Ana en el Estado de Sonora: Mexico, Departamento de exploraciones y estudios geológicos, Folleto de divulgación, no. 19, September, 1926.

Foerste, August Frederic.

- 815. Cephalopoda of Lake Timiskaming area and certain related species: Canada, Geol. Survey, Mem. 145, pp. 64–93, 2 figs., 7 pls., 1925.
- Notes on cephalopod genera; chiefly coiled Silurian forms: Denison Univ., Sci. Lab., Jour., vol. 21, pp. 1–69, 34 pls., March, 1925.
- 817. Cephalopoda from the Ordovician and Silurian of Great Slave Lake: Canada, Geol. Survey, Bull, no. 44, pp. 65-72, 1 pl., 1926.
- 818. Actinosiphonate, trochoceroid, and other cephalopods: Denison Univ.

 Bull., vol. 26, no. 6, Sci. Lab. Jour., vol. 21, pp. 285–383, 22 pls.,

 September, 1926.

Foley, Lyndon L.

819. The origin of the faults in Creek and Osage counties, Oklahoma (with discussion by F. H. Lahee, W. T. Thom, jr., W. A. J. M. van der Gracht, W. W. Rubey, and others): Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 3, pp. 293–303, 5 figs., March, 1926.

820. Mechanics of the Balcones and Mexia faulting: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 12, pp. 1261–1269, 7 figs., December,

Foran, W. T. See Paige, 1938; Smith, 2370.

Forbes, J. J.

821. Coal losses of Tennessee: Tennessee, Dept. Educ., Div. Geology, Bull. 33–E, 36 pp., 2 figs., 1925.

Forrester, G. C.

822. Origin of the buried Whirlpool-St. Davids gorge: Am. Jour. Sci., 5th ser., vol. 12, pp. 244–248, 2 figs., September, 1926.

Foshag, William Frederick. See also Larsen, 1545.

823. Hedyphane from Franklin Furnace, New Jersey: Am. Mineralogist, vol. 10, no. 10, pp. 351-353, October, 1925.

824. The minerals of Obsidian Cliff, Yellowstone National Park, and their origin; U. S. Nat. Mus., Proc., vol. 68, art. 17, 18 pp., 5 figs., 4 pls., 1926.

825. Saline lakes of the Mohave Desert region: Econ. Geology, vol. 21, no. 1, pp. 56-64, January-February, 1926.

826. The identity of newtonite with alunite: Am. Mineralogist, vol. 11, no. 2, pp. 33–35, February, 1926.

827. Radiated chrysotile from Franklin Furnace, New Jersey: Am. Mineralogist, vol. 11, no. 2, pp. 38-39, February, 1926.

828. Processes in contact metamorphism (discussion): Econ. Geology, vol. 21, no. 2, pp. 194–197, March-April, 1926.

Foulk, Charles William.

829. Industrial water supplies of Ohio; Ohio, Geol. Survey, 4th ser., Bull. no. 29, 406 pp., 1925.

Fowke, Gerard.

830. The genesis of the Ohio River: Indiana Acad. Sci., Proc., vol. 34, pp. 81–102, 3 figs., 1925.

831. Note on the preglacial drainage of the Tradewater River, Kentucky: Indiana Acad. Sci., Proc., vol. 35, pp. 109-110, 1 fig., 1926.

Fox, James P.

832. Geomorphogeny of the Berkeley Hills between the city of Berkeley and San Pablo Bay (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 211, March 30, 1926.

Foye, Wilbur Garland.

833. Geology and structure of the eastern highland of Connecticut (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 166, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, p. 157, March, 1925.

834. Correlation of the metamorphic rocks of northeastern Connecticut with those of adjacent portions of Massachusetts (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 156, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, p. 159, March, 1926.

Foye, Wilbur Garland-Continued.

835. The occurrence of thulite at Haddam, Connecticut: Am. Mineralogist, vol. 11, no. 8, pp. 210–213, 3 figs., August, 1926.

836. Fall excursion of the New England intercollegiate geologists: Science, new. ser., vol. 64, p. 421, October 29, 1926.

Fralich, Charles D. See Torrey, 2576.

Frankenfield, John S. See Hawkins, 1044.

Freeman, Horace.

837. The genesis of sulphide ores: Eng. and Min. Jour.-Press, vol. 120, no. 25, pp. 973–975, December 19, 1925; Bol. minero, t. 21, no. 1, pp. 8–12, January, 1926.

838. Genesis of sulphide ores: Eng. and Min. Jour-Press, vol. 121, no. 14, pp. 571-572, April 3, 1926.

839. Genesis of sulphide ores: Eng. and Min. Jour., vol. 122, no. 9, pp. 340-341, August 28, 1926.

Freeman, Otis W.

840. The origin of Swimming Woman Canyon, Big Snowy Mountains, Montana, an example of the pseudo-cirque formed by landslide sapping: Jour. Geology, vol. 33, no. 1, pp. 75-79, 2 figs., January-February, 1925.

841. Scabland mounds of eastern Washington: Science, new ser., vol. 64, pp. 450-451, November 5, 1926.

842. Mammoth found in loess of Washington: Science, new ser., vol. 64, p. 477, November 12, 1926.

Fretz, A. Henry.

843. Memorial of F. B. Peck: Am. Mineralogist, vol. 11, no. 3, pp. 55-56, March, 1926.

Frick, Childs.

844. Prehistoric evidence: Natural History (Am. Mus. Nat. Hist., Jour.), vol. 26, no. 5, pp. 440-448, 3 figs., September-October, 1926.

Friedlaender, Immanuel.

845. Bemerkungen zu den Abbildungen vom Kilauea-Ausbruch im Mai, 1924: Zeitschr. Vulkanologie, Bd. 10, H. 1, p. 47, 2 pls., September, 1926.

846. Ausbruch des Mauna Loa, Hawaii, im April, 1926: Zeitschr. Vulkanologie, Bd. 10, H. 1, pp. 48–49, 1 fig., September, 1926.

Fritz, Madeleine A.

847. The stratigraphy and paleontology of Toronto and vicinity, Part IV;
Hydrozoa, Echinodermata, Trilobita, markings: Ontario Dept.
Mines, 32d Ann. Rept., vol. 32, pt. 7, pp. 1–34, 5 figs., 3 pls., 1925.

848. The stratigraphy and paleontology of the Workman's Creek section of the Cincinnatian series of Ontario: Roy. Soc. Canada, Proc. and Trans., 3d ser., vol. 20, sec. 4, pp. 77–107, 1 fig., 1 table, 4 pls., 1926.

Fuller, Margaret Bradley.

849. Early Quaternic drainage diversions around Mount Olympus, Colorado: Pan-Am. Geologist, vol. 43, no. 1, pp. 51-54, 2 figs., February, 1925.

850. The bearing of some remarkable potholes on the early Pleistocene glaciation of the Front Range, Colorado: Jour. Geology, vol. 33, no. 3, pp. 224–235, 11 figs., April–May, 1925.

86012-28--5

Fuller, Margaret Bradley-Continued.

851. Contact metamorphism in the Big Thompson schist of north central Colorado: Am. Jour. Sci., 5th ser., vol. 11, pp. 194–200, 1 fig., March, 1926.

852. Pre-Cambrian sedimentation in northern Colorado (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 161, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, pp. 161–162, March, 1926.

Fureron, A. S.

853. An unusual oolite near Hayfield, Frederick County, Virginia (abstract):
Iowa Acad. Sci., Proc., 1925, vol. 32, p. 360 [1926].

Furlong, Eustace Leopold. See also Stock, 2461.

854. Notes on the occurrence of mammalian remains in the Pleistocene of Mexico, with a description of a new species, *Capromeryx mexicana*: California, Univ., Dept. Geol. Sci., Bull., vol. 15, no. 5, pp. 137–152, 11 figs., 1925.

Gage, R. B.

855. (and Larsen, Esper S., and Vassar, Helen E.). Schallerite, a new arseno-silicate mineral from Franklin Furnace, New Jersey: Am. Mineralogist, vol. 10, no. 1, pp. 9–11, January, 1925.

Gale, Hoyt Stoddard.

856. Borate deposits near Kramer, California: Am. Inst. Min. and Met. Eng.,
Trans. [preprint], no. 1553, 15 pp., 1 fig., February, 1926; vol. 73,
pp. 449-463, 1 fig., 1926; abstract, Mining and Metallurgy, vol. 7,
no. 233, p. 227, May, 1926.

Galloway, Jesse James.

857. Revision of the classification and nomenclature of Foraminifera (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, pp. 235-236, March 30, 1926.

858. Methods of correlation by means of Foraminifera: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 6, pp. 562-567, June, 1926.

Galloway, John D.

859. Annual report of the minister of mines [of British Columbia] for the year ended 31st December, 1924 . . . 388 pp., figs., pls., maps, Victoria, B. C., 1925.

860. Notes on the Cariboo district of British Columbia: Canadian Inst. Min. and Met., Bull., no. 160, pp. 812–823, 3 figs., August, 1925; Trans., vol. 28, pp. 401–413, 4 figs. [1926].

861. Annual report of the minister of mines [of British Columbia] for the year ended 31st December, 1925 . . . 466 pp., figs., pls., maps, Victoria, B. C., 1926.

Galpin, Sidney L.

862. The geology of the more refractory clays and shales of Iowa: Iowa Geol Survey, vol. 31, pp. 53-89, 7 figs., 2 pls. [1926?].

Gálvez, Vicente.

863. Informe preliminar acerca de las aguas subterráneas de la parte del Valle de San Luis Potosí comprendida entre la ciudad de este mismo nombre y Jarral de Berrio: Mexico, Departamento de exploraciones y estudios geológicos, Folleto de divulgación, no. 12, pp. 3–20, map, August, 1925.

Gálvez, Vicente-Continued.

- 864. Informe preliminar acerca de la hidrología subterránea de la cuenca entre San Luis Potosí y Alaquines, Estado de San Luis Potosí: Mexico, Departamento de exploraciones y estudios geológicos, Folleto de divulgación, no. 17, pp. 3-19, June, 1926.
- 865. (and Hernández, Apolinar). Informe preliminar sobre la hidrología subterránea de la cuenca entre Pendencia y Ranchito. Estado de San Luis Potosí: Mexico, Departamento de exploraciones y estudios geológicos, Folleto de divulgación, no. 17, pp. 31-42, June, 1926.
- 866. Los pueblos de Villa de Álvarez, Coquimatlán, Ixtlahuacán. Tecomán y Minatitlán, del Estado de Colima, considerados en sus recursos en aguas subterráneas: Mexico, Inst. geol., Anales, t. 2, no. 4 pp. 91–127, 45 figs., 1926.

García, José Aurelio.

- 867. Monografía del grafito: Bol. minero, t. 21, no. 2, pp. 64-75, 1 pl., February, 1926.
- 868. Monografía del estaño: Bol. minero, t. 22, no. 1, pp. 6-29, 1 pl. (map). July, 1926. September Legentie very 2, Joseph R all a

Gardner, James Henry. See Kentucky Geol. Survey, 1377.

Gardner, Julia A.

- 869. The detection of the Chipola fauna in the Marks Head marl: Washington Acad. Sci., Jour., vol. 15, no. 12, pp. 264-268, June 19, 1925.
- 870. A new Midway brachiopod, Butler salt dome, Texas: Am. Jour. Sci., 5th ser., vol. 10, pp. 134-138, 1 pl., August, 1925.
- 871. The molluscan fauna of the Alum Bluff group of Florida: U. S. Geol. Survey, Prof. Paper 142, pp. 1-184, 28 pls., 1926.
- 872. The nomenclature of the superspecific groups of Corbula in the lower Miocene of Florida: Nautilus, vol. 40, no. 2, pp. 41-47, October, 1926.
- 873. On Scott's new correlation of the Texas Midway; Am. Jour. Sci., 5th ser., vol. 12, pp. 452–455, November, 1926.
- 874. The restoration of Ostrea multilirata Conrad 1857: Washington Acad. Sci., Jour., vol. 16, no. 19, pp. 513-514, November 18, 1926.

Gaylord, E. G.

875. (and Hanna, G. D.). Correlation of organic shales in the southern end of the San Joaquin valley, California: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 2, pp. 228-234, 2 pls., March-April, 1925.

Gedney, Edwin K. See Fisher, 809.

Geijer, Per. Mosi ; alisoget en diabes di alifaned la somellagia enT .198

- 876. Processes in contact metamorphism: Econ. Geology, vol. 20, no. 7, pp. 689-690, November, 1925.
- 877. The publishing of geological information: Econ. Geology, vol. 21, no. 6, pp. 605-609, September, 1926.
 - 878. James Furman Kemp: Geol. Fören. Stockholm, Förh., Bd. 48, H. 4, p. 593, November-December, 1926. Geology of salt dome oil fields. See DeGolyer, 638.

George, Harold Coulter.

879. (and Bunn, John R.). Petroleum engineering in the Fox and Graham oil and gas fields, Carter County, Oklahoma: 81 pp., 4 figs., U. S., Bur. Mines, in cooperation with Office of Indian Affairs, The State of Oklahoma, and Ardmore Chamber of Commerce, 1924.

[Mimeographed.]

George, Russell D.

880. Origin of oil shales; geology and distribution of oil shales. In McKee, Ralph H., Shale oil, pp. 27-36, 37-43, 60-73, 2 figs., New York, 1925.

Gerry, G. N. manufacture blacker and long afterest to and manually

881. Gold, silver, copper, lead, and zinc in Idaho (mine report): U. S. Geol. Survey, Mineral Resources, 1923, pt. 1, pp. 375-404, February 12, 1925.

882. Gold, silver, copper, lead, and zinc in Washington (wine report): U. S Geol. Survey, Mineral Resources, 1923, pt. 1, pp. 405–416, February 12, 1925.

883. Gold, silver, copper, lead, and zinc in Montana in 1923 (mine report):
U. S. Geol. Survey, Mineral Resources, 1923, pt. 1, pp. 447-479,
March 18, 1925.

Gester, G. C.

884. Observations relating to the origin and accumulation of oil in California:

Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 9, pp. 892–900,
September, 1926.

Gibson, R. E. See Adams, 9.

Gibson, Russell. See Crawford, 545.

Gidley, James Williams. See also Bryan, 324; Wade, 2685.

885. A Pleistocene cave deposit of western Maryland: Smithsonian Inst., Ann. Rept., 1918, pp. 281–287, 6 pls., 1920.

886. Fossil Proboscidea and Edentata of the San Pedro Valley, Arizona: U. S. Geol. Survey, Prof. Paper 140, pp. 83–95, 13 pls., February 8, 1926

887. Fossil man in Florida (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, pp. 239-240, March 30, 1926.

888. (and Loomis, Frederic B.). Fossil man in Florida: Am. Jour. Sci., 5th ser., vol. 12, pp. 254-264, September, 1926.

Gilbert, Geoffrey.

889. The antipathy of bornite and pyrrhotite: Econ. Geology, vol. 20, no. 4 pp. 364-370, June-July, 1925.

890. Some magnetite-hematite relations: Econ. Geology, vol. 20, no. 6, pp. 587-596, 1 fig., September-October, 1925.

891. The significance of hematite in certain ore deposits: Econ. Geology, vol. 21, no. 6, pp. 560-577, 1 fig., September, 1926.

Gilbert, James Zacchaeus.

892. Family Muraenidae, *Deprandus lestes* Jordan and Gilbert, new genus and species: Southern California Acad. Sci., Bull., vol. 20, pt. 1, pp. 29–30, 1 fig., April, 1921.

Giles, Albert William.

893. The geology and coal resources of the coal-bearing portion of Lee County, Virginia: Virginia Geol. Survey, Bull. no. 26, pp. 1–177, 11 figs., 21 pls. (incl. maps), 1925. Giles. Albert William-Continued.

894. Thomas Leonard Watson: Science, new ser., vol. 61, pp. 225–226, February 27, 1925.

895. Virginia Geological Survey [activities]: Pan-Am. Geologist, vol. 44, no. 4, pp. 325-326. November, 1925.

Gill, J. E.

896. Gunflint iron-bearing formation, Ontario: Canada, Geol. Survey, Summ. Rept., 1924, pt. C, pp. 28-88, 1 fig., 4 pls. (incl. maps), 1926.

Gillson, Joseph L.

897. (and Shannon, Earl V.). Szaibelyite from Lincoln County, Nevada:
Am. Mineralogist, vol. 10, no. 6, pp. 137-139, June, 1925.

898. Zircon, a contact-metamorphic mineral in the Pend Oreille district,
Idaho: Am. Mineralogist, vol. 10, no. 8, pp. 187–194, August, 1925.

899. Conichalcite from the Bristol mine, Lincoln County, Nevada: Am. Mineralogist, vol. 11, no. 5, pp. 109-114, May, 1926.

900. Optical notes on some minerals from the Mahopac iron mine, Brewster, New York: Am. Mineralogist, vol. 11, no. 10, pp. 281–286, October, 1926.

901. Pigeonite from the Triassic traps of the Connecticut Valley: Am. Mineralogist, vol. 11, no. 11, pp. 317-319, November, 1926.

Gilluly, James. See also Paige, 1938.

902. (and Reeside, John B., jr.). Jurassic formations of eastern Utah (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, pp. 158-159, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, pp. 160-161, March, 1926.

Gilmore, Charles Whitney. See also Wade, 2685.

903. Reptile reconstructions in the United States National Museum: Smithsonian Inst., Ann. Rept., 1918, pp. 271–280, 6 pls., 1920.

904. A nearly complete articulated skeleton of Camarasaurus, a saurischian dinosaur from the Dinosaur National Monument, Utah: Carnegie Mus., Mem., vol. 10, no. 3, pp. 347-384, 5 figs., 5 pls., July 10, 1925.

905. Osteology of ornithopodous dinosaurs from the Dinosaur National Monument: Carnegie Mus., Mem., vol. 10, no. 4, pp. 385-410, 8 figs., 1 pl., July 10, 1925.

906. Fossil footprints from the Grand Canyon: Smithsonian Misc. Coll., vol. 77, no. 9, 41 pp., 23 figs., 12 pls., January 30, 1926.

907. Fossil footprints from the Grand Canyon (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, pp. 240-241, March 30, 1926.

908. A new aetosaurian reptile from the Morrison formation of Utah: Carnegie Mus., Annals, vol. 16, no. 2, pp. 325–348, 4 figs., 3 pls., March, 1926.

909. On a nearly complete lizard skull from the Oligocene of Nebraska: Kansas, Univ., Sci. Bull., vol. 16, no. 6, pp. 229–231, 1 pl., March, 1926.

Girty, George Herbert.

910. On the genera Cladochonus and Monilipora: Jour. Geology, vol. 33, no. 1, pp. 9-27, January-February, 1925.

911. Mississippian formations of San Saba County, Texas; Geologic age and correlation; The macro-fauna of the limestone of Boone age: U. S. Geol. Survey. Prof. Paper 146, pp. 3–4, 24–43, 2 pls., 1926.

Girty, George Herbert-Continued.

912. Faunas of the Pennsylvanian and Mississippian periods: West Virginia Geol. Survey, Mercer, Monroe, and Summers counties, pp. 847-860, 1926.

913. A new area of Carboniferous rocks in Mexico: Science, new ser., vol. 63, pp. 286–287, March 12, 1926.

Gledhill, Thomas Lloyd.

914. Geology along an eastward continuation of Niven's 4th base line: Ontario Dept. Mines, 33d Ann. Rept., vol. 33, pt. 6, pp. 18-39, 13 figs. (incl. map), 1925.

915. Tashota-Onaman gold area, District of Thunder Bay: Ontario Dept.
Mines, 34th Ann. Rept., vol. 34, pt. 6, pp. 65–85, illus., map, 1925;
Canadian Min. Jour., vol. 46, no. 38, pp. 884–885, September 18, 1925.

916. Lightning River gold area, District of Cochrane: Ontario Dept. Mines, 34th Ann. Rept., vol. 34, pt. 6, pp. 86–98, illus., map, 1925; Canadian Min. Jour., vol. 47, no. 9, pp. 226–228, 1 fig., February 26, 1926.

Glenn, Leonidas Chalmers.

917. The northern Tennessee coal field, included in Anderson, Campbell, Claiborne, Fentress, Morgan, Overton, Pickett, Roane, and Scott counties: Tennessee, Dept. Education, Division of Geology (State Geol. Survey), Bull. 33–B, 478 pp., 28 figs., 13 pls., 1925.

918. A new meteorite from Baldwyn, Mississippi: Am. Jour. Sci., 5th ser., vol. 9, p. 488, June, 1925.

919. Geology and physiography of the Red River boundary between Texas and Oklahoma: Pan-Am. Geologist, vol. 43, no. 5, p. 365, June, 1925.

920. The geology of the proposed Great Smoky Mountains National Park: Tennessee Acad. Sci., Jour., vol. 1, no. 2, pp. 13–15, April, 1926.

Glock, Waldo S.

921. Has not geology a message for everybody?: Pan-Am. Geologist, vol. 43, no. 5, pp. 345-348, June, 1925.

Goddard, Pliny E.

922. The antiquity of man in America: Natural History (Am. Mus. Nat. Hist., Jour.), vol. 26, no. 3, pp. 257-259, May-June, 1926.

Godde, H. A.

923. (and Keyes, R. L.). Report on the northeastern flank of the Buena Vista Hills, Midway oil field, Kern County, California: California State Min. Bur., Summary of Operations California Oil Fields, vol. 12, no. 1, pp. 5–12, 1 fig., 3 pls., July, 1926.

Goldman, Marcus Isaac. See also Howe, 1185.

924. Petrography of salt dome cap rock: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 1, pp. 42-78, 33 figs., January-February, 1925; Geology of salt dome oil fields, pp. 50-86, 33 figs., 1926.

925. Testing and adjusting the binocular microscope and suggestions on the use of microscopes in general: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 1, pp. 175–179, 1 fig., January–February, 1925.

926. Petrography of Ordovician and Mississippian limestones at their contact in Texas (abstract): Pan-Am. Geologist, vol. 44, no. 1, p. 79, August, 1925.

Goldman, Marcus Isaac-Continued.

927. (and Merwin, H. E.). Color chart of the committee on sedimentation of the National Research Council: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 6, pp. 1018-1019, September, 1925.

928. Petrology of the contact of the Ordovician Ellenburger limestone and the Mississippian limestone of Boone age in San Saba County, Texas: U. S. Geol. Survey, Prof. Paper 146, pp. 44-59, 27 pls., 1926.

929. Proportions of detrital organic calcareous constituents and their chemical alteration in a reef sand from the Bahamas: Carnegie Inst. Washington, Pub. no. 344 (Papers from the Department of Marine Biology of the Carnegie Institution of Washington, vol. 23), pp. 37-66, 1 fig., February, 1926.

Goldring, Winifred.

930. New museum exhibits: The fossil forests of Gilboa; What is a fossil? What is a geological formation?: New York State Mus. Bull., no. 267, pp. 81-84, 1 pl., 1926.

931. New Upper Devonian plant material [Gilboa, New York]: New York State Mus. Bull., no. 267, pp. 85-87, 5 pls., 1926.

932. New species of Hamilton crinoids [Hamilton, New York]: New York State Mus. Bull., no. 267, pp. 89-92, 1 fig., 2 pls., 1926.

Goldschmidt, Victor Moritz.

933. Metasomatic processes in fissure veins (discussion): Econ. Geology, vol. 21, no. 1, pp. 91-94, January-February, 1926.

Goldthwait, James Walter.

934. The geology of New Hampshire: New Hampshire Acad. Sci., Handbook no. 1, 86 pp., 22 figs., 27 pls., 2 maps, Concord, N. H., Rumford Press, 1925.

935. Late glacial oscillations of level in the St. Lawrence-Ottawa Valley (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, pp. 173-174, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, p. 168, March, 1926.

Goodrich, R. H. See Barton, 132.

Goodwin, W. L.

936. (and Corless, C. V.). Willet Green Miller: Canadian Min. Jour., vol. 46, no. 7, pp. 165-166, portr., February 13, 1925.

Goranson, Roy W.

937. The determination of plagioclase feldspars: Am. Mineralogist, vol. 11, no. 6, pp. 139-154, 4 figs, June, 1926. Gordon, Samuel G.

938. Mineralogical notes, 1-10: Acad. Nat. Sci. Philadelphia, Proc., vol. 77, pp. 1-13, 5 figs., 1926.

939. Penroseite and trudellite; two new minerals: Acad. Nat. Sci. Philadelphia, Proc., vol. 77, pp. 317-324, 1926.

940. Mining cryolite in Greenland: Eng. and Min. Jour.-Press, vol. 121, no. 6, pp. 236-240, 3 figs., February 6, 1926.

Goudge, M. F.

941. Magnesium sulphate in British Columbia: Canada, Dept. Mines, Mines Branch, Investigations of Mineral Resources ... 1924, pp. 62-80, 1 fig., 1926.

Goudge, M. F.-Continued.

942. Sodium carbonate in British Columbia: Canada, Dept. Mines, Mines Branch, Investigations of Mineral Resources ... 1924, pp. 81–102, 1 fig., 3 pls., 1926.

Goudkoff, Paul P.

943. Correlative value of the microlithology and micropaleontology of the oil-bearing formations in the Sunset-Midway and Kern River oil fields: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 5, pp. 482–494, 4 figs., May, 1926.

Gouin, Frank.

944. Oil and gas in Oklahoma; the geology of the oil and gas fields of Stephens County, Oklahoma: Oklahoma Geol. Survey, Bull. no. 40–E, 52 pp., 1 fig., 6 pls. (incl. map), October, 1926.

Gould, Charles Newton.

- 945. Geology in Mid-Continent operations [oil fields of Oklahoma]: Oil and Gas Jour., vol. 23, no. 36, pp. 192, 224, January 29, 1925.
- 946. Recent studies on the Permian of the Plains (abstract): Pan-Am. Geologist, vol. 45, no. 3, pp. 247-248, April, 1925.
- 947. Index to the stratigraphy of Oklahoma; with lists of characteristic fossils by Charles E. Decker: Oklahoma Geol. Survey, Bull. no. 35, 115 pp., chart, September, 1925.
- 948. The correlation of the Permian of Kansas, Oklahoma, and northern Texas: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 2, pp. 144–153, 1 fig. (map), February, 1926.
- 949. (and Lonsdale, John T.). Geology of Texas County, Oklahoma: Oklahoma Geol. Survey, Bull. no. 37, 62 pp., 6 figs., 9 pls., map, April, 1926.
 - 950. Carboniferous rocks of Oklahoma (abstract): Pan-Am. Geologist, vol. 45, no. 3, pp. 248-249, April, 1926.
 - 951. Carbonic rocks of north central Texas (abstract): Pan-Am. Geologist, vol. 45, no. 3, pp. 250-251, April, 1926.
 - 952. Our present knowledge of the Permian of the Great Plains: Jour. Geology, vol. 34, no. 5, pp. 415-421, July-August, 1926.
 - 953. (and Lonsdale, John T.). Geology of Beaver County, Oklahoma: Oklahoma Geol. Survey, Bull. no. 38, 71 pp., 17 figs., map, August, 1926.
 - 954. (and Lewis, Frank E.). The Permian of western Oklahoma and the Panhandle of Texas: Oklahoma Geol. Survey, Circular no. 13, 29 pp., 2 pls. (maps), December, 1926.
 - 955. Oklahoma Survey, seventh field conference: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 12, pp. 1306–1308, December, 1926.

Gould, Laurence McKinley.

- 956. Petrography of some Sierra la Sal dikes [eastern Utah] (abstract):
 Pan-Am. Geologist, vol. 44, no. 2, p. 158, September, 1925.
- 957. Laccolith in the air [La Sal Mountains, Utah] (abstract): Pan-Am. Geologist, vol. 44, no. 2, p. 160, September, 1925.
- 958. The rôle of orogenic stresses in laccolithic intrusions: Am. Jour. Sci., 5th ser., vol. 12, pp. 119–129, 4 figs., August, 1926.

Grabau, Amadeus William.

959. Use of the term "Sinian" (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 175, March 30, 1925.

Graeber, Charles K. See Honess, 1163.

Graham, Richard Percival Devereux.

960. Mines and mineral deposits of Canada: Inst. Min. and Met., Bull. no. 248, 98 pp., 2 pls. (maps), May, 1925; Trans., vol. 34, pt. 2, pp. 251-355, 2 pls. (maps), 1925.

Graham, William A. P.

961. Experiments on the origin of phosphate deposits: Econ. Geology, vol. 20, no. 4, pp. 319-334, 1 fig., June-July, 1925.

962. Notes on hornblende; variations in the chemical composition of hornblende from different types of igneous rocks: Am. Mineralogist, vol. 11, no. 5, pp. 118-123, 3 figs., May, 1926.

Grant, Ulysses Sherman. See also Miller, 1789.

963. The age of the earth: Jour. Geography, vol. 24, no. 7, pp. 276-279, October, 1925.

Grant, William M. See Hanna, 1017.

Grawe, Oliver R.

964. Some breccias of the St. Louis, Missouri, region: Washington Univ. Studies, vol. 13. Sci. ser., no. 1, pp. 45-62, 6 pls., 1925.

Greene, Frank Cook.

965. Granite wells in the northern Mid-Continent region: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 2, pp. 351-354, March-April, 1925.

966. Geology of the Stonewall quadrangle, Oklahoma: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 2, p. 355, March-April, 1925.

967. Various types of granite form largest group in Mid-Continent; Oil and Gas Jour., vol. 24, no. 22, pp. 69, 183, October 22, 1925.

968. (and Pond, W. F.). The geology of Vernon County: Missouri Bur. Geology and Mines, 2d ser., vol. 19, 152 pp., 14 figs., 14 pls. (incl. map), 1926.

969. Oil and gas in Oklahoma; subsurface stratigraphy of western Oklahoma: Oklahoma Geol. Survey, Bull. 40-D, 14 pp., 1 fig., map, September, 1926.

Gregory, John Walter.

970. Magmatic ores: Canadian Min. Jour., vol. 46, no. 28, pp. 665-668, July 10, 1925; Faraday Soc., Trans., vol. 20, no. 60, pp. 449-458, April 1925.

971. Movements of the continents (abstract): Pan-Am. Geologist, vol. 44, no. 4, pp. 333-334, November, 1925.

972. The Sudbury nickel ores: Geol. Mag., vol. 63, pp. 190-192, April, 1926.

Gregory, William King. See also Williston, 3034.

973. The family tree of man: Am. Mus. Nat. Hist., Guide Leaflet series no. 52, pp. 36-48, illus., May, 1925.

974. (and Hellman, Milo). The dentition of *Dryopithecus* and the origin of man: Am. Mus. Nat. Hist., Anthropological Papers, vol. 28, pt. 1, pp. 1-123, 32 figs., 25 pls., 1926.

975. Paleontology of the human dentition; structural stages in the evolution of the cheek teeth; Am. Jour. Phys. Anthropology, vol. 9, no. 4, pp. 401–426, 8 figs., October-December, 1926.

Grier, N. M.

976. The fossil flora of the vicinity of Cold Spring Harbor [Long Island, New York]: Am. Midland Naturalist, vol. 9, no. 10, pp. 513-527, July, 1925.

Grier, N. M.—Continued.

977. The geology of Long Island with especial reference to the Cold Spring Harbor region and its flora: Am. Midland Naturalist, vol. 9, no. 11, pp. 531-563, 1 fig., September, 1925.

Grimm, M. W.

978. (and Howe, Henry V.). New Waskom gas field of Louisiana and Texas:
Pan-Am. Geologist, vol. 43, no. 5, pp. 333-335, 1 pl. (map), June,
1925.

Griswold, W. R.

979. Chemistry of ore solutions: Eng. and Min. Jour., vol. 122, no. 6, p. 224, August 7, 1926.

Grout, Frank Fitch.

980. (and Conhaim, H. J.). The rate of secondary enrichment by acid waters: Econ. Geology, vol. 20, no. 3, pp. 289-291, May, 1925.

981. Coutchiching problem (with discussion by Andrew C. Lawson): Geol. Soc. America, Bull., vol. 36, no. 2, pp. 351-364, 9 figs., June 30, 1925; abstract, no. 1, p. 160, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, pp. 153-154, March, 1925.

982. Relation of texture and composition of clays: Geol. Soc. America, Bull., vol. 36, no. 2, pp. 393-415, 2 figs., June 30, 1925.

983. A peculiar shonkinite related to granite: Am. Jour. Sci., 5th ser., vol. 9, pp. 472-480, 5 figs., June, 1925.

984. The Vermilion batholith of Minnesota: Jour. Geology, vol. 33, no. 5, pp. 467-487, 11 figs., July-August, 1925.

985. A magnetite segregation in banded syenite in Minnesota: Econ. Geology, vol. 20, no. 5, pp. 424-430, 4 figs., August, 1925.

986. The geology and magnetite deposits of northern St. Louis County, Minnesota: Minnesota Geol. Survey, Bull. no. 21, 220 pp., 16 figs., 12 pls., maps, 1926.

987. The use of calculations in petrology; a study for students: Jour. Geology, vol. 34, no. 6, pp. 512–558, 11 figs., August-September, 1926.

Groves, James.

988. Fossil charophyte fruits from Texas: Am. Jour. Sci., 5th ser., vol. 10, pp. 12-14, 3 figs., July, 1925.

Gruner, John Walter.

989. Discovery of life in the Archean: Jour. Geology, vol. 33, no. 2, pp. 151-152, 3 figs., February-March, 1925.

stoutiling of the steamwood, ITG !

990. Silicification of erosion surfaces (discussion): Econ. Geology, vol. 21, no. 1, pp. 97-98, January-February, 1926.

991. Magnetite-martite-hematite: Econ. Geology, vol. 21, no. 4, pp. 375-393, 3 figs., 1 pl., June-July, 1926.

992. The Soudan formation and a new suggestion as to the origin of the Vermilion iron ores: Econ. Geology, vol. 21, no. 7, pp. 629-644, 6 figs., November, 1926.

Guerard, Albert.

993. Eric Knight Jordan: Science, new ser., vol. 63, p. 327, March 26, 1926.

Gunter, Herman.

994. Administrative report: Florida State Geol. Survey, 16th Ann. Rept., 1923-4, pp. 7-14, 1925.

Gunter, Herman-Continued.

995. Statistics of mineral production in Florida during 1923: Florida State Geol. Survey, 16th Ann. Rept., pp. 17-25, 1 pl., 1925.

996. Statistics of mineral production in Florida during 1924: Florida State Geol. Survey, 17th Ann. Rept., pp. 11-19, 1926.

Haanel, Benjamin F.

997. Final report of the peat committee . . .; peat, its manufacture and uses: Canada, Dept. Mines, Mines Branch, no. 641, 298 pp., 46 figs., 58 pls., 1926.

Haase, Leo G.

998. Little geological studies in southern California (author's illustrated notes on geological formations in southern California). 24 pp., illus., Long Beach, California, 1926.

Habermeyer, George Conrad.

999. Public ground-water supplies in Illinois: Illinois State Water Survey, Bull, no. 21, 710 pp., 11 figs, and pls., 1925.

1000. (and Stiles, S.). The Blue Ridge salt dome, Fort Bend County, Texas: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 2, pp. 304-316, 4 figs., March-April, 1925; Geology of salt dome oil fields, pp. 600-612, 4 figs., 1926.

Hager, Dorsey.

1001. Oil possibilities in western Washington: Oil and Gas Jour., vol. 23, no. 13-A, pp. 32, 112-113, 2 figs., August 21, 1924.

1002. Practical oil geology . . . Fourth edition, 309 pp., 161 pp., New York, McGraw-Hill Book Company, 1926.

1003. Meteor Crater [Arizona]: Eng. and Min. Jour.-Press, vol. 121, no. 9, p. 374, February 27, 1926.

Hake, Benjamin F.

1004. Occurrence of Pholadomya in the Miocene of California (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 214, March 30, 1926.

Hall, C. W.

1005. Geology of the Yoquivo, Chihuahua, mining district [Mexico]: Am. Inst. Min. and Met. Eng., Trans. [preprint], no. 1530, 15 pp., 5 figs., February, 1926; Trans., vol. 74, pp. 223-237, 5 figs., 1926; abstract, Mining and Metallurgy, vol. 7, no. 230, p. 77, February. O22. Driftwood Oreck map area, Babine Monntainel British, 3201 online; Can

Hammer, A. A.

1006. (and Lloyd, A. M.). A study of some Upper Cretaceous sedimentation and diastrophism in Montana: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 5, pp. 886-903, 1 fig., 2 pls., August, 1925.

1007. (and Lloyd, A. M.). Notes on the Quadrant formation of east-central Montana: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 10, pp. 986-996, 2 pls. (incl. maps), October, 1926.

Hance, James Harold.

1008. Some questions in general and petroleum geology which are suggested by oil occurrences in Crawford County, Pennsylvanian beds : Illinois State Acad, Sci., Trans., vol. 17, pp. 199-203, 1925.

Hancock, Eugene Thomas.

- 1009. Geology and coal resources of the Axial and Monument Butte quadrangles, Moffat County, Colorado: U. S. Geol. Survey, Bull. 757, 134 pp., 6 figs., 19 pls., 1925.
- Hanna, G. Dallas. See also Anderson, 47; Gaylord, 875; Taft, 2497; Takahashi, 2498.
 - 1010. Miocene marine vertebrates in Kern County, California: Science, new ser., vol. 61, pp. 71-72, January 16, 1925.
 - 1011. The extraction of fossils from refractory rocks: Jour. Geology, vol. 33, no. 5, pp. 545-547, July-August, 1925.
 - 1012. The age and correlation of the Kreyenhagen shale in California: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 6, pp. 990–999, September, 1925.
 - 1013. Tertic expanse of North American continent in Pacific Ocean: Pan-Am. Geologist, vol. 44, no. 2, p. 147, September, 1925.
 - 1014. Was there a Pacific continent?: Science, new ser., vol. 62, pp. 491–492, November 27, 1925.
 - 1015. Paleontology of Coyote Mountain, Imperial County, California: California Acad. Sci., Proc., 4th ser., vol. 14, no. 18, pp. 427-502, 1 fig., 10 pls., March 23, 1926.
 - 1016. Microscopical research in California petroleum field: Oil and Gas Jour., vol. 24, no. 45, p. 96, April 1, 1926.
 - 1017. (and Grant, William M.). Miocene marine diatoms from Maria Madre Island, Mexico: California Acad. Sci., Proc., 4th ser., vol. 15, no. 2, pp. 115–192, 1 fig., 11 pls., April 16, 1926.
 - 1018. Further notes on Scalez petrolia: Nautilus, vol. 40, no. 1, pp. 14-16, July, 1926.

Hanna, Marcus Albert.

- 1019. Notes on the genus Venericardia from the Eocene of the West Coast of America: California, Univ., Dept. Geol. Sci., Bull., vol. 15, no. 8, pp. 281-306, 9 pls., May 21, 1925.
- 1020. An interesting volcanic ash from Calcasieu Parish, Louisiana: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 1, pp. 93-95, 1 pl., January, 1926.
 - 1021. Geology of the La Jolla quadrangle, California: California, Univ., Dept. Geol. Sci., Bull., vol. 16, no. 7, pp. 187–246, 7 pls., map, November 20, 1926.

Hanson, George.

- 1022. Driftwood Creek map area, Babine Mountains, British Columbia: Canada, Geol. Survey, Summ. Rept., 1924, pt. A, pp. 19–37, 1 fig., map, 1925.
- 1023. Prince Rupert to Burns Lake, British Columbia: Canada, Geol. Survey, Summ. Rept., 1924, pt. A, pp. 38-46, 1925.
- 1024. Reconnaissance in Zymoetz River area, Coast district, British Columbia: Canada, Geol. Survey, Summ. Rept., 1925, pt. A, pp. 100-119, map, 1926.

Hard, Herbert A. See Meinzer, 1749.

Hares, C. J. a doldw geologe musloring ban brings at enothing omos .2001

1025. Tertiary glaciation in Wyoming, Colorado, and Utah: Science, new ser., vol. 62, p. 308, October 2, 1925.

Hares, C. J.—Continued.

1026. Glacial origin of the Bishop conglomerate of Wyoming, Colorado, and Utah (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, pp. 174– 175, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, p. 168, March, 1926.

1027. What is the Denver formation? (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 175, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, p. 168; March, 1926.

1028. Post-Miocene-pre-Eocene glaciation in the Rocky Mountains (abstract):
Geol. Soc. America, Bull., vol. 37, no. 1, pp. 175–176, March 30,
1926; Pan-Am. Geologist, vol. 45, no. 2, pp. 168–169, March, 1926.

Harker, Alfred.

1029. The Sudbury laccolite: Geol. Mag., vol. 63, p. 192, April, 1926.

Harkness, R. B.

1030. Natural gas in 1923 and petroleum in 1923: Ontario Dept. Mines, 33d Ann. Rept., vol. 33, pt. 5, 1924, 112 pp., illus., 1925.

1031. Natural gas in 1924 and petroleum in 1924: Ontario Dept. Mines, 34th Ann. Rept., vol. 35, pt. 5, 74 pp., 3 figs., 1926.

Harris, Gilbert Dennison.

1032. Notes on the paleontology [of the Island of Trinidad]: Johns Hopkins Univ., Studies in Geology, no. 7, pp. 87-112, 5 pls., 1926.

Harris, T. M. one harrelos ellegers coult lo santigiresal ban vall

1033. The Rhaetic flora of Scoresby Sound, east Greenland: Meddelelser om Groenland, Bd. 68, pp. 43–148, 34 figs., 13 pls., 1926.

Hartnagel, Chris Andrew.

1034. Industrial geology [of New York]: New York State Mus. Bull. no. 260, pp. 18-21, 1925.

1035. The oil fields of New York State: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 4, pp. 798-802, July, 1925.

1036. (and Bishop, Sherman C.). Additional records of Pleistocene mammals [in New York]: New York State Mus. Bull., no. 267, pp. 22-25, 1926.

1037. Industrial geology [of New York]: New York State Mus. Bull. no. 267, pp. 34–37, 1926.

Hartsook, Arthur J. . . A morganism of sending an appropriate wear and a sending

1038. Chemistry and the petroleum industry: Rice Inst. Pam., vol. 11, no. 1, pp. 74-94, January, 1924.

Hasebrink, A.

1039. Das Eisenerzvorkommen von Wabana (Neufundland): Glückauf Jg. 62, no. 18, pp. 553-561, 16 figs., May 1, 1926.

Hassan, A. A.

1040. The geological importance of the Marathon fold [Brewster County, Texas]: Oil Trade, vol. 17, no. 2, pp. 32-34, 67-69, 1 fig., February, 1926.

Hawkins, Alfred C.

1041. Fluorite from Rochester, New York: Am. Mineralogist, vol. 10, no. 2, pp. 34–36, February, 1925.

1042. Directional factors in radio crystal detectors: Am. Mineralogist, vol. 11, no. 6, pp. 164–165, June, 1926.

Hawkins, Alfred C .- Continued.

1043. Notes on pyrite and celestite from Rochester, New York: Am. Mineralogist, vol. 11, no. 6, p. 165, June, 1926.

1044. (and Frankenfield, John S.). Pyrite from Cornwall, Pennsylvania:
Am. Mineralogist, vol. 11, no. 9, pp. 252-253, 1 fig., September, 1926.

Hawley, J. E. and and and the second of the

1045. Geology and economic possibilities of Sutton Lake area, District of Patricia: Ontario Dept. Mines, 34th Ann. Rept., vol. 34, pt. 7, 56 pp., illus. (incl map), 1926

1046. An evaluation of the evidence of life in the Archean: Jour. Geology, vol. 34, no. 5, pp. 441–461, 7 figs., July–August, 1926.

Hay, Oliver Perry. Sull of 23 day and food soldown sendous add

1047. Further observations on some extinct elephants: Biol. Soc. Washington, Proc., vol. 35, pp. 97–101, September 30, 1922.

1048. A revision of the Pleistocene period in North America, based especially on glacial geology and vertebrate paleontology: Washington Acad. Sci., Jour., vol. 15, no. 6, pp. 126–133, March 19, 1925.

1049. On remains of mastodons found in Texas, Anancus brazosius and Gomphotherium cimarronis: U. S. Nat. Mus., Proc., vol. 66, art. 35, 15 pp., 9 figs., 4 pls., April 25, 1925.

1050. A further and detailed description of the type of *Elephas roosevelti*Hay and descriptions of three recently referred specimens: U. S.

Nat. Mus., Proc., vol. 66, art. 34, 6 pp., 1 fig., 4 pls., May 22, 1925.

1051. On the correlation of certain Pleistocene deposits and their fossils: Washington Acad. Sci., Jour., vol. 15, no. 11, pp. 239-246, June 4, 1925.

1052. Vicissitudes of Pleistocene vertebrates (abstract): Pan-Am. Geologist, vol. 43, no. 5, pp. 365–367, June, 1925.

1053. Extinct proboscideans of Mexico: Pan-Am. Geologist, vol. 44, no. 1, pp. 21–37, 2 pls., August, 1925.

1054. Review of Dr. Günther Schlesinger's paper on mastodons: Washington Acad. Sci., Jour., vol. 15, no. 16, pp. 381–387, October 4, 1925.

1055. Report on the progress of the investigation on the Pleistocene of North America and its vertebrate animals: Carnegie Inst. Washington, Year Book no. 24, p. 357, December, 1925.

1056. Two new Pleistocene mastodons: Washington Acad. Sci., Jour., vol. 16, no. 2, pp. 35–41, 2 pls., January 19, 1926.

1057. A collection of Pleistocene vertebrates from southwestern Texas: U. S. Nat. Mus., Proc., vol. 68, art. 24, 18 pp., 2 figs., 8 pls., 1926.

1058. Description of remains of an elephant found at Port Williams, Washington: Washington Acad. Sci., Jour., vol. 16, no. 6, pp. 154-159, 1 pl., March 19, 1926.

1059. The geological age of Tuolumne Table Mountain, California: Washington Acad. Sci., Jour., vol. 16, no. 13, pp. 358-361, July 9, 1926.

1060. On the geological age of Pleistocene vertebrates found at Vero and Melbourne, Florida: Washington Acad. Sci., Jour., vol. 16, no. 14, pp. 387–392, August 19, 1926.

1061. Professor Osborn on the mammals and the birds of the California tar pools: Science, new ser., vol. 64, pp. 426-427, October 29, 1926.

Heald, Kenneth C.

1062. Meeting of the Geological Society of America: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 1, p. 100, January, 1926.

Heald, Kenneth C .- Continued.

1063. The Kevin-Sunburst oil field, Montana: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 2, p. 197, February, 1926.

1064. Annual meeting of the Cordilleran branch of the Geological Society of America: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 4, pp. 449–450, April, 1926.

1065. The geology of the Ingomar anticline, Treasure and Rosebud counties,
Montana: U. S. Geol. Survey, Bull. 786, pp. 1-37, 5 figs., 2 pls.
(incl. map), October 18, 1926.

Heck, Nicholas H.

1066. Earthquakes of 1925: Seismological Soc. America, Bull., vol. 15, no. 2, pp. 106–113, 3 figs., June, 1925.

1067. Earthquakes: Sci. Monthly, vol. 32, no. 2, pp. 139-142, February, 1926.

1068. Evidences of great submarine changes in configuration acc upanied by earthquakes (abstract): Pan-Am. Geologist, vol. 45, no. 3, pp. 255–256, April, 1926.

1069. How earthquakes are located: Sci. Monthly, vol. 22, no. 5, pp. 455–458, May, 1926.

1070. Outstanding problems in seismology: Washington Acad. Sci., Jour., vol. 16, no. 9, pp. 240-244, May 4, 1926.

1071. Earthquake epicenters in the north Pacific: Seismological Soc. America, Bull., vol. 16, no. 3, pp. 182–186, 2 figs., September, 1926.

Hedberg, Hollis D.

1072. The effect of gravitational compaction on the structure of sedimentary rocks: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 11, pp. 1035–1072, 3 figs., November, 1926.

Heikes, Victor Conrad.

1073. Gold, silver, copper, lead, and zinc in Utah in 1923: U. S. Geol. Survey, Mineral Resources, 1923, pt. 1, pp. 417-445, March 20, 1925.

1074. Gold, silver, copper, lead, and zinc in Nevada in 1923 (mine report): U. S. Geol. Survey, Mineral Resources, 1923, pt. 1, pp. 481–514, March 21, 1925.

1075. Gold, silver, copper, lead, and zinc in Arizona in 1923 (mine report):
U. S. Geol. Survey, Mineral Resources, 1923, pt. 1, pp. 515-548,
March 6, 1925.

Heiland, C. A. disable resident and the second and

1076. Construction, theory, and application of magnetic field balances: Am.

Assoc. Petroleum Geologists, Bull., vol. 10, no. 12, pp. 1189–1200,
7 figs., December, 1926.

1077. Schweydar-Bamberg types of Eötvös torsion balance: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 12, pp. 1201–1209, 3 figs., December, 1926.

Heim, Arnold.

1078. Notes on the Jurassic of Tamazunchale, Sierra Madre Oriental, Mexico: Eclogae Geologicae Helvetiae, vol. 20, no. 1, pp. 84–87, 2 figs., October, 1926.

1079. (and others). Vulkanische Ereignisse; Berichte über die jüngste vulkanische Tätigkeit in Mittelamerika: Zeitschr. Vulkanologie, Bd. 10, H. 2, pp. 114–119, December, 1926.

Hellman, Milo. See Gregory, 974.

Henderson, Charles William.

1080. Gold and silver in South Dakota (mine report): U. S. Geol. Survey, Mineral Resources, 1923, pt. 1, pp. 587-590, April, 1925.

1081. Gold, silver, and copper in Wyoming: U. S. Geol. Survey, Mineral Resources, 1923, pt. 1, p. 591, April, 1925.

1082. Gold, silver, copper, lead, and zinc in New Mexico in 1923 (mine report): U. S. Geol. Survey, Mineral Resources, 1923, pt. 1, pp. 593-607, July 30, 1925.

1083. Gold, silver, copper, and lead in Texas (mine report): U. S. Geol. Survey, Mineral Resources, 1923, pt. 1, p. 609, July 30, 1925.

1084. Mining in Colorado; a history of discovery, development, and production: U. S. Geol. Survey, Prof. Paper 138, 263 pp., 20 figs., 1 pl. (map), 1926.

Henderson, E. P. See Ross, 2159; Short, 2323.

Henderson, Junius.

1085. Geology in its relation to landscape. vii, 152 pp., illus., Boston, Massachusetts, The Stratford Company, 1925.

1086. Sources of material from which petroleum may have been derived: California Acad. Sci., Proc., 4th ser., vol. 15, no. 10, pp. 269-278, April 26, 1926.

Henley, A. S.

1087. The Big Hill salt dome, Jefferson County, Texas; Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 3, pp. 590-593, 2 figs., May-June, 1925; Geology of salt dome oil fields, pp. 497-500, 2 figs., 1926.

Henninger, W. F.

1088. Occurrence of sulphur waters in the Gulf Coast of Texas and Louisiana, and their significance in locating new domes: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 1, pp. 35–37, January–February, 1925; Geology of salt dome oil fie'ds, pp. 774–776, 1926.

Hereza y Ortuna, Juan.

1089. Synopsis of a theory of metallogeny: Eng. and Min. Jour.-Press, vol. 119, no. 4, pp. 160–162, January 24, 1925.

Hernández, Apolinar. See also Gálvez, 865.

1090. Informe preliminar acerca de las aguas subterráneas de San Luis Potosí á Catorce: Mexico, Departamento de exploraciones y estudios geológicos, Folleto de divulgación, no. 12, pp. 21–30, August, 1925.

1091. Informe preliminar de las aguas subterráneas de las zonas de Cedral,
Matehuala, Vallejo y Ciudad del Maíz, en el Estado de San Luis
Potosí: Mexico, Departamento de exploraciones y estudios geológicos, Folleto de divulgación, no. 17, pp. 20-30, June, 1926.

Herrera, Alfonso L.

1092. Mineralogía y geología. 471 pp., illus., Mexico, Herrero Hermanos, Sucesores, 1925.

Hertlein, Leo George. See also Jordan, 1329, 1331.

1093. Pectens from the Tertiary of Lower California: California Acad. Sci., Proc., 4th ser., vol. 14, no. 1, pp. 1-35, 6 pls., July 21, 1925.

1094. New species of marine fossil Mollusca from western North America: Southern California Acad. Sci., Bull., vol. 24, pt. 2, pp. 39–44, 2 pls., August 17, 1925. Hertlein, Leo George-Continued.

1095. (and Crickmay, Colin H.). A summary of the nomenclature and stratigraphy of the marine Tertiary of Oregon and Washington: Am. Philos. Soc., Proc., vol. 64, no. 2, pp. 224-282, 1925.

Hess, Frank L. See also Larsen, 1544.

1096. The age of the earth: Sci. Monthly, vol. 20, no. 6, pp. 597-602, June, 1925.

1097. The natural history of the pegmatites: Eng. and Min. Jour.-Press, vol. 120, no. 8, pp. 289-298, 17 figs., August 22, 1925.

1098. Platinum near Centennial, Wyoming: U. S. Geol. Survey, Bull. 780, pp. 127-135, 1 fig., January 13, 1926.

1099. Oolites (abstract): Washington Acad. Sci., Jour., vol. 16, no. 3, pp. 76-77, February 4, 1926.

1100, Potash and the South: Min. Congress Jour., vol. 12, no. 5, pp. 344-346, 398, 3 figs., May, 1926.

1101. Rare metals, cobalt, molybdenum, nickel, tantalum, titanium, tungsten, radium, uranium, and vanadium in 1924: U. S., Bur. Mines, Mineral Resources U. S., 1924, pt. 1, pp. 451-476, June 7, 1926.

Hewett, Donnel Foster.

1102. (and Schaller, W. T.). Hisingerite from Blaine County, Idaho: Am. Jour. Sci., 5th ser., vol. 10, pp. 29-38, 1 fig., July, 1925.

1103. Carnotite discovered near Aguila, Arizona : Eng. and Min. Jour.-Press, vol. 120, no. 1, p. 19, July 4, 1925.

1104. Geology and oil and coal resources of the Oregon Basin, Meeteetse, and Grass Creek Basin quadrangles, Wyoming: U. S. Geol. Survey. Prof. Paper 145, 111 pp., 10 figs., 32 pls. (incl. maps), 1926.

1105. Progress in the survey of the Ivanpah quadrangle, Nevada-California (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, pp. 164-165, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, p. 164, March, 1926.

Hewitt, E. A.

1106. Exploration methods in the Park City, Utah, district: Min. Congress Jour., vol. 12, no. 1, pp. 54-55, 2 figs., January, 1926.

Heyl, P. R.

1107. The density of the earth and the inferences to be drawn from it: Nat. Research Council, Bull., vol. 11, pt. 2, no. 56, pp. 26-28, November, 1926; abstract, Am. Jour. Sci., 5th ser., vol. 12, p. 271, September, 1926. 1920 CAS-922 ong Andoverson 2001, pllori

Hicks, Clifford. See Patton, 1979.

Hill, E. G. See Fettke, 786.

Hill, James Madison.

1108. Gold, silver, copper, and lead in California (mine report): U. S. Geol. Survey, Mineral Resources, 1923, pt. 1, pp. 331-362, February 14, 1925.

1109. Gold, silver, copper, and lead in Oregon (mine report): U. S. Geol. Survey, Mineral Resources, 1923, pt. 1, pp. 363-374, February 14, 1925.

1110. Bauxite and aluminum in 1924: U. S. Geol. Survey, Mineral Resources. 1924, pt. 1, pp. 21-29, August 4, 1925.

86012-28-6

Hill, James Madison-Continued.

1111. (and Loughlin, G. F.). Magnesium and its compounds in 1924: U. S. Bur. Mines, Mineral Resources, pt. 2, pp. 125–140, November 5, 1925.

1112. California gold production, 1849–1923; Econ. Geology, vol. 21, no. 2, pp. 172–179, 1 fig., March-April, 1926.

Hinds, Henry.

1113. Unconformities in the Pennsylvanian: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 12, pp. 1303–1304, December, 1926.

Hinds, Norman Ethan Allen.

1114. Geological observations on the Island of Maul, Hawaii: Science, new ser., vol. 61, pp. 316-318, March 20, 1925.

1115. Geology of the Island of Maui, Hawaii (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, pp. 173-174, March 30, 1925.

1116. The Green River formation: Science, new ser., vol. 62, p. 34, July 10, 1925.

1117. Melilite and nephelite basalt in Hawaii: Jour. Geology, vol. 33, no. 5, pp. 526-539, July-August, 1925.

1118. Maui and the Maui group, Hawaii: Geog. Soc. Philadelphia, Bull., vol. 23, no. 4, pp. 147–165, 3 figs., 2 pls., October, 1925.

1119. Amphitheater valley heads: Jour. Geology, vol. 33, no. 8, pp. 816–818, 1 fig., November–December, 1925.

1120. Fault topography in Hawaii (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 210, March 30, 1926.

1121. Geomorphology of the Island of Maui, Hawaii (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, pp. 215-216, March 30, 1926.

Hirschi, H.

1122. Beiträge zur Petrographie von Baja California, Mexiko: Schweizerische Min. und Petrog. Mitt., Bd. 6, H. 2, pp. 346–350, map, 1926.

Hixon, Hiram W.

1123. Hydrocarbon veindikes and oil shales; Eng. and Min. Jour.-Press, vol. 119, no. 16, p. 653, April 18, 1925.

1124. Chlorine as a magmatic solvent for metals: Eng. and Min. Jour.-Press. vol. 121, no. 6, p. 249, February 6, 1926.

Hobbs, William Herbert.

1125. The growing mountain ranges of the Pacific region: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 1, pp. 746-757 [1924].

1126. Contrasted lava types in the Pacific region: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 1, pp. 838-842 [1924].

1127. Reef formations as an index of mountain-building processes: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 2, pp. 1120-1128, 2 figs [1924].

1128. The unstable middle section of the island arcs: Geologisch-Mijnbouw-kundig Genootschap voor Nederland en Kolonien Verh., Geol. ser., D. 8 (Gedenkboek . . . Dr. R. D. M. Verbeek), pp. 219–261, 19 figs., 4 pls., 1925.

1129. The trough-deeps of the island arcs: International Geol. Cong., 13th Sess., Belgium, 1922, fasc. 2, pp. 725–730, 5 figs., 1925.

1130. Cause of recent earthquakes (abstract): Pan-Am. Geologist, vol. 44, no. 2, p. 160, September, 1925.

1131. [Review of] Movement of continental masses under action of tidal forces, by F. B. Taylor: Jour. Geology, vol. 33, no. 7, pp. 751-752, October-November, 1925.

1

Hobbs, William Herbert-Continued.

1132. The glacial anticyclones; the poles of the atmospheric circulation: Michigan, Univ., Studies, Sci. ser., vol. 4, 198 pp., 53 figs., New York, The Macmillan Company, 1926.

1133. Plans of the University of Michigan expedition to Greenland in 1926–27 (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 144, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 1, p. 92, February, 1926.

1134. James Hutton, the pioneer of modern geology: Science, new ser., vol. 64, pp. 261-265, September 17, 1926.

Hodge, Edwin Thomas.

- 1135. Quantitative mineralogical and chemical classification of igneous rocks (abstract): Pan-Am. Geologist, vol. 43, no. 5, pp. 374–375, June, 1925.
- 1136. Mount Multnomah, ancient ancestor of the Three Sisters: Oregon, Univ., Pub., vol. 3, no. 2 [vol. 2, no. 10], 160 pp., 94 figs., map, August 1, 1925.
- 1137. Geology of Mount Jefferson [Oregon]: Mazama, Ann. Ser., vol. 7, no. 2, pp. 25-58, 5 figs., map, December, 1925.
- 1138. Practical classification of igneous rocks: Pan-Am. Geologist, vol. 46, no. 1, pp. 25-48, 5 figs., 1 pl., August, 1926.

Hodgson, Ernest A.

- 1139. The recording of seismologic data at the Dominion Observatory, Ottawa, Canada: Union géodésique et géophysique internationale, Section de séismologie, Ser. A, fasc. no. 2, pp. 89–120, Paris, 1925.
- 1140. The St. Lawrence earthquake, February 28, 1925: Seismological Soc. America, Bull., vol. 15, no. 2, pp. 84–90, 16 figs., June, 1925.
- 1141. The rotation effects of the St. Lawrence earthquake of February 28, 1925: Royal Astronomical Soc. Canada, Jour., vol. 19, no. 6. pp. 169–178, 1 fig., October, 1925.
- 1142. Hypothesis correlating data collected with reference to St. Lawrence earthquake of February 28, 1925 (abstract): Pan-Am. Geologist, vol. 45, no. 2, pp. 172–173, March, 1926.
- 1143. Seismology in Canada (abstract): Seismological Soc. America, Bull., vol. 16, no. 2, pp. 153–154, June, 1926.

Hodson, Floyd.

1144. (and Hodson, Helen K.). Short cuts in picking out and sectioning Foraminifera: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 11, pp. 1173-1174, November, 1926.

Hodson, Helen K.

- 1145. Names for the stellate "Orthophragmina": Am. Jour. Sci., 5th ser., vol. 12, pp. 353-354, October, 1926.
- 1146. Foraminifera from Venezuela and Trinidad; Bull. Am. Paleontology, vol. 12, no. 47, 46 pp., 8 pls., December 24, 1926.

Hoffman, Malvin G.

- 1147. Volcanic tuffs in central Oklahoma: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 2, p. 344, March-April, 1925.
- 1148. Veining along faults in the Pennsylvanian sandstones in Oklahoma: Jour. Geology, vol. 34, no. 1, pp. 83-84, January-February, 1926.

Hoffmeister, John Edward. See Vaughan, 2661, 2662.

Holden, Edward Fuller. See also Kraus, 1502.

1149. The transmission of light by citrine: Am. Mineralogist, vol. 10, no. 5, pp. 127–128, 1 fig., May, 1925.

1150. The cause of color in smoky quartz and amethyst: Am. Mineralogist, vol. 10, no. 9, pp. 203-252, 5 figs., September, 1925.

1151. Pigments of amethyst and smoky quartz (abstract): Pan-Am. Geologist, vol. 44, no. 2, pp. 158-159, September, 1925.

Holden, Roy Jay.

1

1152. Origin of Clinton hematite ores: Econ. Geology, vol. 20, no. 1, pp. 101–103, January-February, 1925.

Holland, L. F. S.

1153. Meteor Mountain crater, Arizona: Eng. and Min. Jour.-Press, vol. 119, no. 6, pp. 253-254, February 7, 1925.

Hollick, Arthur. Off July on 2 July 2 on 3 July day visit

1154. A new fossil species of Hydrangea [Tertiary, Alaska Peninsula]: Torrey Bot. Club, Bull., vol. 52, no. 1, pp. 21–22, 1 pl., January, 1925.

1155. Paleobotanical exploration in Porto Rico: New York Bot. Garden, Jour., vol. 27, no. 317, pp. 102-104, May, 1926.

1156. Report on a tree trunk and associated lignitic débris excavated in Manhattan Island [New York]: Am. Mus. Novitates, no. 213, 6 pp., 2 figs., May 6, 1926.

1157. Fossil walnuts and lignite from Porto Rico: New York Bot. Garden, Jour., vol. 27, no. 322, pp. 223-227, 1 fig., October, 1926.

1158. Records of glaciation in the New York Botanical Garden: New York Bot. Garden, Jour., vol. 27, no. 324, pp. 269-278, 7 figs., December, 1926.

Holmes, William Henry.

1159. The antiquity phantom in American archeology [antiquity of artifacts from Melbourne, Florida]: Science, new ser., vol. 62, pp. 256-258, September 18, 1925.

Holtedahl, Olaf.

1160. Some points of structural resemblance between Spitsbergen and Great Britain, and between Europe and North America: Norske Videnskaps-Akademi i Oslo, Avhandl., Mat.-Nat. Kl., 1925, no. 4, 20 pp., 5 figs., 1925.

1161. Tectonics of Arctic regions: Pan-Am. Geologist, vol. 46, no. 4, pp. 257–272, 3 figs., 2 p.s., November, 1926.

Holzwasser, F.

1162. Geology of Newburgh and vicinity: New York State Mus. Bul. no. 270, 95 pp., 12 figs., 39 pls., map and section sheet, 1926.

Honess, Arthur Pharoah.

1163. (and Graeber, Charles K.). Petrography of the mica peridotite dike at Dixonville, Pennsylvania: Am. Jour. Sci., 5th ser., vol. 12, pp. 484–494, 6 figs., December, 1926.

Honigmann, E.

1164. La industria del grafito en el Estado de Sonora: Bol. minero, t. 20, no. 2, pp. 49-60, August, 1925.

1165. La Cía, minera San José, S. A., municipalidad de La Colorada, distrito de Hermosillo, Sonora: Bol. minero, t. 20, no. 2, pp. 60-67, August, 1925. Honigmann, E.-Continued.

1166. Las miuas del Cerro Colorado, municipalidad de San Marcial, distrito de Guaymas, Sonora: Bol. minero, t. 20, no. 2, pp. 67–73, August, 1925.

Hood, O. P. See Odell, 1920.

Hoots, H. W.

1167. Geology of a part of western Texas and southeastern New Mexico, with special reference to salt and potash (preface by J. A. Udden):
U. S. Geol. Survey, Bull. 780, pp. 33-126, 1 fig., 15 pls. (incl. maps), 1925.

Hopkins, Percy Eugene. See also Burrows, 349.

1168. Lebel and Gauthier townships (area between Kirkland and Larder lakes): Ontario Dept. Mines, 32d Ann. Rept., vol. 32, pt. 4, pp. 53–88, illus., map, 1925.

1169. Larder Lake gold area: Ontario Dept. Mines, 33d Ann. Rept., pt. 3, pp. 1–26, 14 figs., 1 pl., map, 1925.

1170. Night Hawk Lake gold area: Ontario Dept. Mines, 33d Ann. Rept., vol. 33, pt. 3, pp. 27–36, 5 figs., map, 1925.

1171. Notes on gold in McNeil and other townships; Ontario Dept. Mines, 33d Ann. Rept., vol. 33, pt. 3, pp. 37-40, 3 figs., 2 pls. (maps), 1925.

1172. The Costello gold deposit at Pancake Lake [Ontario]: Canadian Min. Jour., vol. 46, no. 25, pp. 601-604, 3 figs., June 19, 1925.

Hopwood, Arthur T.

1173. A fossil rice-rat from the Pleistocene of Barbuda [West Indies]: Ann. and Mag. Nat. Hist., 9th ser., vol. 17, pp. 328-330, 1 pl., March, 1926.

Hore, Reginald Edwin. See also Bruce, 313; Tyrrell, 2611, 2613.

1174. Willet G. Miller: Mining and Metallurgy, vol. 6, no. 219, pp. 160-161, March, 1925.

Hoskins, J. Hobart. 12-212 and T. and

1175. Structure of Pennsylvanian plants from Illinois: Bot. Gazette, vol. 82, no. 4, pp. 427–437, 2 pls., December, 1926.

Hotchkiss, William Otis. I. C. D. B. B. L. Low - Cook and - San Barrette Ba

1176. The Lake Superior geosyncline: Lake Superior Min. Inst., Proc., 24th Ann. Meeting, vol. 24, pp. 140-148, 1925. (Reprinted from Geol Soc. America, Bull., vol. 34, 1923.

1177. (and Bean, E. F.). A brief outline of the geology, physical geography, geography, and industries of Wisconsin: Winconsin Geol. and Nat. Hist. Survey, Bull. no. 67, 60 pp., 27 figs., 5 pls., 1925.

Hovey, Edmund Otis.

1178. The volcanic Caribbees: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 1, pp. 836-837 [1924].

1179. A new meteoric stone from Johnstown, Weld County, Colorado; with supplemental notes by George P. Merrill and Earl V. Shannon:
Am. Mus. Novitates, no. 203, 13 pp., 6 figs., November 30, 1925.

Howard, C. S. See Collins, 495.

Howard, L. O.

1180. The Chewelah and Colville districts of northeastern Washington: Mining and Metallurgy, vol. 6, no. 222, pp. 271-278, 8 figs., June, 1925.

Howard, W. V.

1181. Devonian volcanic rocks near Dalhousie, New Brunswick: Geol. Soc. America, Bull., vol. 37, no. 3, pp. 475-496, 2 figs., September 30, 1926; abstract, no. 1, p. 152, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, pp. 158-159, March, 1926.

Howe, Henry Van Wagenen. See also Grimm, 978.

1182. "The Many salt dome," Sabine Parish, Louisiana: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 1, pp. 170-171, January-February,

1183. Extension of Midway formation into Louisiana: Pan-Am. Geologist, vol. 43, no. 4, p. 309, May, 1925,

1184. Astoria, mid-Tertic type of Pacific coast: Pan-Am. Geologist, vol. 45, no. 4, pp. 295-306, 1 pl. (map), May, 1926.

Howe, Marshall Avery.

1185. (and Goldman, Marcus I.). Lithothamnium (?) ellisianum, sp. nov., from the Jurassic Ellis formation of Montana: Am. Jour. Sci., 5th ser., vol. 10, pp. 314–324, 11 figs., October, 1925.

Howell, Benjamin Franklin.

1186. Gilbert Van Ingen (1869-1925): Science, new ser., vol. 62, pp. 101-103, July 31, 1925.

1187. The faunas of the Cambrian Paradoxides beds at Manuels, Newfoundland: Bulletins of American Paleontology, vol. 11, no. 43, 140 pp., 3 pls., 7 tables, November 11, 1925.

1188. The Cambrian-Ordovician stratigraphic column of southeastern Newfoundland: Canadian Field-Naturalist, vol. 40, no. 3, pp. 52-57, March, 1926.

1189. Problematical fossil, possibly a fish plate, from the Cambrian Paradoxides beds of northwestern Vermont (abstract): Geol, Soc. America. Bull., vol. 37, no. 1, p. 236, March 30, 1926.

1190. Cambrian Paradoxides beds in northwestern Vermont (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, pp. 242-243, March 30, 1926.

Hubbard, George David.

1191. Colloids in geologic problems: Chemical News, vol. 125, pp. 390-395, December 29, 1922; vol. 126, pp. 6-9, January 5, 1923.

1192. (and Champion, Milton M.). Physiographic history of five river valleys in northern Ohio: Ohio Jour. Sci., vol. 25, no. 2, pp. 51-84, March, 1925. Hubbard, W. E. In appoint and the english point A. A. H. anged base and

1193. (and Thompson, W. C.). The geology and oil fields of Archer County, Texas: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 5, pp. 457-481, 6 figs., 1 pl., May, 1926.

Hudnall, James S. See Kentucky Geol. Survey, 1365, 1370, 1373, 1380, 1384, 1390, 1391, 1396, 1397, 1398, 1399, 1401.

1194. The Elkhorn coal field: Kentucky Geol. Survey, ser. 6, vol. 27, pp. 131-133, map, 1925.

Hudson, Frank Samuel.

1195. (and Taliaferro, N. L.). Calcium chloride waters from certain oil fields in Ventura County, California: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 7, pp. 1071-1088, October, 1925.

Hudson, Frank Samuel—Continued.

1196. (and Taliaferro, N. L.). An interesting example of a deep bore hole:

Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 8, pp. 775–785,

2 figs., August, 1926.

Hudson, George Henry.

1197. The need of improved technique in illustration: Jour. Geology, vol. 33, no. 6, pp. 642-657, 1 fig., 4 pls., August-September, 1925.

Huene, Friedrich von.

1198. Notes on the age of the continental Triassic beds in North America, with remarks on some fossil vertebrates: U. S. Nat. Mus., Proc., vol. 69, art. 18, 10 pp., 8 figs., 1926.

Huguenin, Emile.

1199. Inglewood oil field: California State Min. Bur., Summary of Operations California Oil Fields, vol. 11, no. 12, pp. 5–15, 5 figs., 2 pls., June, 1926.

Hulin, Carlton D. Mayor 28-28 qu

1200. Mineralization in the vicinity of Randsburg, California: Eng. and Min. Jour.-Press, vol. 119, no. 10, pp. 407-411, 6 figs., March 7, 1925.

1201. Mineralization in the Randsburg quadrangle, California (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 208, March 30, 1925.

1202. Geology and ore deposits of the Randsburg quadrangle, California: California State Min. Bur., Bull. 95, 152 pp., 8 figs., 31 pls. (incl. map), 1925. Review by J. E. Spurr, Eng. and Min. Jour.-Press, vol. 121, no. 11, pp. 463-464, 2 figs., March 13, 1926.

Hull, Joseph Poyer Deyo.

1203. Guide notes on the Midway in southwestern Arkansas: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 1, pp. 167–170, January-February, 1925.

1204. Prothro salt dome, Bienville Parish, Louisiana: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 5, pp. 904-906, August, 1925.

1205. Discovery of Nigger Creek oil pool, Limestone County, Texas: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 10, pp. 997-998, October, 1926.

1206. The Denver meeting [of the American Association of Petroleum Geologists]: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 11, pp. 1178–1181, November, 1926.

Hume, George Sherwood.

1207. The Paleozoic outlier of Lake Timiskaming, Ontario and Quebec: Canada, Geol. Survey, Mem. 145, 129 pp., 7 figs., 16 pls., 1925.

1208. Oil developments and prospects in Canada, 1924: Canadian Inst. Min. and Met., Bull., no. 154, pp. 163–169, 1 fig. (map), February, 1925: Trans., vol. 28, pp. 222–230, 1 fig. [1926]; Inst. Petroleum Technologists, Jour., vol. 11, no. 51, pp. 411–417, August, 1925.

1209. The Wainwright-Irma oil and gas area, Alberta: Inst. Petroleum Technologists, Jour., vol. 11, no. 49, pp. 201–202, April, 1925.

1210. The search for oil in Alberta: Canadian Min. Jour., vol. 46, no. 52, pp. 1180–1182, 1 fig., December 25, 1925.

1211. Ordovician and Silurian fossils from Great Slave Lake [Northwest Territories, Canada]: Canada, Geol. Survey, Bull. no. 44, pp. 59-64, 2 pls., 1926.

Hume, George Sherwood-Continued.

1212. Oil and gas prospects of the Wainwright-Vermilion area, Alberta: Canada, Geol. Survey, Summ. Rept., 1924, pt. B, pp. 1–22, map, 1926.

1213. Oil prospects in the vicinity of Battle River at the Alberta-Saskatchewan boundary: Canada, Geol. Survey, Summ. Rept. 1925, pt. B, pp. 1–13, map, 1926; Canadian Min. Jour., vol. 47, no. 15, pp. 393–395, 1 fig., April 9, 1926.

1214. Notes on developments during 1925 in the Wainwright field, Alberta: Canada, Geol. Survey, Summ. Rept., 1925, pt. B, pp. 14-15, 1926.

Hummel, K.

1215. Development of ore deposit theories in Europe: Econ. Geology, vol. 20, no. 5, pp. 495-499, August, 1925.

Humphreys, William Jackson.

1216. Some factors of climatic control (abstract): Pan-Am. Geologist, vol. 43, no. 5, pp. 378-379, June, 1925.

1217. The origin of the ocean and the atmosphere: Nat. Research Council, Bull., vol. 11, pt. 2, no. 56, pp. 32–33, November, 1926; abstract, Am. Jour. Sci., 5th ser., vol. 12, pp. 272–273, September, 1926.

Hunter, C. D. See Kentucky Geological Survey, 1400.

Hunter, John Frederick.

1218. Pre-Cambrian rocks of Gunnison River, Colorado: U. S. Geol. Survey, Bull. 777, 94 pp, 5 figs., 15 pls. (incl. map), 1925.

Hurst, M. E.

1219. Tungsten deposits near Hazelton, British Columbia: Canada, Geol. Survey, Summ. Rept., 1924, pt. A, pp. 44-46, 1925.

Hussakof, Louis.

1220. Structure of the head and dorsal armor of *Dinichthys pustulosus* Eastman: Geol. Soc. America, Bull., vol. 37, no. 1, p. 245, March 30, 1926.

Hussey, R. C.

1221. The Richmond formation of Michigan; Michigan, Univ., Mus. Geology, Contr., vol. 2, no. 8, pp. 113-187, 1 fig., 11 pls., July 15, 1926.

Hyde, Jesse Earl.

1222. Collecting fossil fishes from the Cleveland shale: Natural History (Am. Mus. Nat. Hist., Jour.), vol. 26, no. 5, pp. 497-504, 10 figs., September-October, 1926.

Ickes, E. L.

1223. The determination of formation thicknesses by the method of graphical integration: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 3, pp. 451–463, 3 figs., May-June, 1925.

1224. Origin of the faults in Creek and Osage counties, Oklahoma; Am. Assoc.

Petroleum Geologists, Bull., vol. 10, no. 7, pp. 727–729, 1 fig., July,
1926.

Ingall, Elfric Drew.

1225. Deep borings in British Columbia and the Yukon: Canada, Geol. Survey, Summ. Rept., 1924, pt. A. pp. 145-148, 1925.

1226. Deep borings in the prairie provinces and northwest territories: Canada, Geol. Survey, Summ. Rept., 1924, pt. B, pp. 105-116, 1926.

Ingall, Elfric Drew-Continued.

1227. Deep borings in Ontario, Quebec, and maritime provinces: Canada, Geol. Survey, Summ. Rept., 1924, pt. C, pp. 240–246, 1926.

1228. Deep borings in British Columbia and the Yukon: Canada, Geol. Survey, Summ. Rept., 1925, pt. A, p. 233, 1926.

1229. Deep borings in the prairie provinces and northwest territories: Canada, Geol. Survey, Summ. Rept., 1925, pt. B, pp. 31–42, 1926.

Ingalls, Albert G.

1230. Out of doors with the earth: Sci. Am., vol. 132, pp. 365-367, 9 figs.,
June, 1925.

1231. Are the continents drifting?: Sci. Am., vol. 134, pp. 8-9, 6 figs., January, 1926.

1232. Little-known ice ages of great antiquity: Sci. Am., vol. 135, pp. 272–273, October, 1926.

1233. Mastodon or mammoth?: Sci. Am., vol. 135, pp. 289-290, 292, 8 figs.. October, 1926.

Irwin, J. S.

1234. Faulting in the Rocky Mountain region: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 2, pp. 105-129, 7 figs., February, 1926.

Jaeger, Fritz.

1235. Untersuchungen über das diluviale Klima in Mexiko: Gesell. Erdkunde Berlin, Zeitschr., no. 9–10, pp. 366–373, 1925.

1236. Forschungen über das diluviale Klima in Mexiko: Petermanns Mitteilungen, Ergänzungsheft no. 190, 64 pp., 13 pls. (incl. maps), Gotha, Justus Perthes, 1926.

Jaggar, Thomas Augustus.

1237. (and Thurston, L. A.). The Hawaiian Volcano Research Association: Pan-Pacific Sci. Cong., Australia, 1923, vol. 1, pp. 847-850 [1924].

1238. The lava tide, seasonal tilt, and the volcanic cycle: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 2, pp. 1369-1375, 4 figs. [1924].

1239. [Observations on Hawaiian volcanoes, chiefly on Halemaumau]: Hawaiian Volcano Observatory, Monthly Bull., vol. 13, 1925, vol. 14, nos. 1-4, illus., January-April, 1926.

1240. The Hawaiian volcanoes (abstract): Washington Acad. Sci., Jour., vol. 15, no. 13, p. 304, July 19, 1925.

1241. Earthquake insurance: Matériaux pour l'étude des calamités, ann. 2, no. 7, pp. 191–217, October–December, 1925.

1242. Geological notes on Mauna Kea: Hawaiian Volcano Observatory, Monthly Bull., vol. 13, no. 10, pp. 75-77, 6 pls., October, 1925.

1243. Plus and minus volcanicity (abstract): Washington Acad. Sci., Jour., vol. 15, no. 18, pp. 416–417, November 4, 1925; Bull. volcanologique, 2° ann., nos. 5–6, pp. 327–328, 1925.

1244. Progress of volcanology during 1924: Washington Acad. Sci., Jour., vol. 15, no. 18, pp. 424–425, November, 1925; Bull. volcanologique, 2° ann., nos. 5–6, pp. 336–337, 1925.

1245. So-called volcanic earthquakes: Science, new ser., vol. 63, pp. 414-415, April 23, 1926.

1246. The section of volcanology of the U. S. Geological Survey: Science, new ser., vol. 64, pp. 242–243, September 10, 1926.

James, W. F.

1247. (and Mawdsley, J. B.). Cléricy and Kinojevis map areas, Témiscamingue and Abitibi counties, Quebec: Canada, Geol. Survey, Summ. Rept., 1924, pt. C, pp. 99–125, 2 maps, 1926; in part, Canadian Min. Jour., vol. 46, no. 10, pp. 243–246, 3 figs., March 6, 1925.

Janensch, W. Search on late e-pairway entering sets at equivol qual .8331

1248. Dinosaurier-Reste aus Mexiko: Centralbl. Mineralogie, Abt. B, 1926, no. 6, pp. 192–197, 2 figs., 1926.

Jeffrey, Edward Charles. 107 and 102 address and dalw stood to and 1021

1249. Coal and civilization. 178 pp., 44 figs., 1 pl., New York, The Macmillan Company, 1925.

1250. Coal in relation to coke: Am. Inst. Min. and Met. Eng., Trans. [pre-print], no. 1399, 10 pp., 12 figs., January, 1925; with discussion, Trans., vol. 71, pp. 149–164, 13 figs., 1925; abstract, Mining and Metallurgy, vol. 64, no. 228, p. 614, 1925.

Jeffreys, Harold.

1251. Origin of the solar system; a reply to "T. C. C.": Am. Jour. Sci., 5th ser., vol. 9, pp. 395–405, May, 1925.

Jelliff, Fred R. 1991 and Took and R. 1991 and R. 1991 and R.

1252. A prolific coal field [Knox County]: Illinois State Acad. Sci., Trans., vol. 18, pp. 383-393, 4 figs., 1925.

1253. Life in a coal measure mud rock: Illinois State Acad. Sci., Trans., vol. 19, pp. 306-307, 1 pl., 1926.

Jenkins, Olaf Pitt.

1254. Clastic dikes of southeastern Washington (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 202, March 30, 1925.

1255. Genetic types of Washington lead ores: Pan-Am. Geologist, vol. 43, no. 5, pp. 349-356, 1 pl. (map), June, 1925.

1256. Mechanics of clastic dike intrusion: Eng. and Min. Jour.-Press, vol. 120, no. 1, p. 12, 2 figs., July 4, 1925.

1257. Clastic dikes of eastern Washington and their geologic significance:

Am. Jour. Sci., 5th ser., vol. 10, pp. 234–246, 2 figs., September,
1925.

1258. The Spokane flood; a discussion: Jour. Geology, vol. 33, no. 7, pp. 747-748. October-November, 1925.

1259. Extensive preglacial oxidation of lead deposits in northeastern Washington (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 209, March 30, 1926.

Jepson, Glenn L.

1260. Fossil collecting in the badlands [South Dakota]: Black Hills Engineer, vol. 14, no. 2, pp. 77–86, 12 figs., March, 1926.

1261. The oldest known cat, Hoplophoneus oharrai [from badlands, South Dakota]: Black Hills Engineer, vol. 14, no. 2, pp. 87-92, 2 figs...
March, 1926.

Jillson, Willard Rouse. See also Kentucky Geological Survey.

1262. Early mineral explorations in the Mississippi Valley (1540-1840): Illinois State Hist. Library, Pub. no. 31 (Illinois State Hist. Soc., Trans. 1924), pp. 41-57, 1924.

Jillson, Willard Rouse-Continued.

1263. Administrative report for the (Sixth) Kentucky Geological Survey, years 1924 and 1925: Kentucky Geol. Survey, ser. 6, Pam. 5, 54 pp., 7 pls., 1925.

1264. Geologic map of Kentucky showing oil, gas, coal, asphalt, and fluorspar fields: Kentucky Geol. Survey, ser. 6, 1925. Scale: 1 inch=30 miles.

1265. Early glaciation in Kentucky: Pan-Am. Geologist, vol. 44, no. 1, pp. 17-20, 1 pl., August, 1925.

1266. Agricultural perspective of Kentucky geology: Pan-Am. Geologist, vol. 44, no. 4, pp. 295–308, 387–396, 5 pls., map, November and December, 1925.

1267. New oil pools of Kentucky: Kentucky Geol. Survey, ser. 6, vol. 12, 394 pp., 103 illus. (incl. maps), 1926.

1268. Résumé of Kentucky's mineral resources: Kentucky Geol. Survey, ser. 6, Pam. 7, 11 pp., illus., 1926.

1269. Fire clays of northeastern Kentucky: Kentucky Geol. Survey, ser. 6, Pam. 8, 9 pp., 3 figs., 1926.

1270. The clays of Kentucky: The Ceramist, vol. 7, no. 5, pp. 281–285, 3 figs., February, 1926; Kentucky Geol. Survey, ser. 6, Pam. 9, 15 pp., 6 figs., 1926.

1271. A bibliography of the several books, reports, papers, and maps principally relating to geology written and prepared by Willard Rouse Jillson: Kentucky Geol. Survey, ser. 6, Pam. no. 11, 22 pp., 1926.

1272. Recent geological investigations in Kentucky: The Kentucky Outlook, vol. 2, no. 2, p. 6, January 9, 1926.

1273. Natural resources of Kentucky: The Kentucky Outlook, vol. 2, no. 7, pp. 4-5, February 13, 1926.

1274. Major drainage modifications of Big Sandy River: Pan-Am. Geologist, vol. 46, no. 1, pp. 49-51, 1 fig., 1 pl., August, 1926.

1275. Oil domes of Ashland [Boyd County, Kentucky]: Pan-Am. Geologist, vol. 46, no. 2, pp. 121–122, 1 pl., September, 1926.

Johannsen, Albert.

1276. (and Phemister, T. C.). A note on the elasticity of some minerals and its measurement: Jour. Geology, vol. 33, no. 3, pp. 268-271, 1 fig., April-May, 1925.

1277. A revised field classification of igneous rocks: Jour. Geology, vol. 34, no. 2, pp. 181–182, February-March, 1926.

1278. (and Merritt, C. A.). Comparative losses in crushing and sifting rock minerals: Jour. Geology, vol. 34, no. 3, pp. 275-280, April-May. 1926.

1279. The recognition of minerals and the determination of their properties in crushed rocks: Jour. Geology, vol. 34, no. 5, pp. 462–465, July-August, 1926.

1280. Petrological abstracts and reviews: Jour. Geology, vol. 34, no. 5, pp. 475-478, July-August, 1926.

Johnson, Bertrand Leroy.

1281. Tin in 1924; U. S. Geol. Survey, Mineral Resources, 1924, pt. 1, pp. 31–33, August 7, 1925.

Johnson, Douglas Wilson. See also Pratt, 2019, 2022.

1282. The New England-Acadian shore line. xx, 608 pp., 273 figs., New York, John Wiley & Sons, 1925.

Johnson, Douglas Wilson-Continued.

1283. Blue book of the geological field excursion from New York to Gettysburg. 29 pp., 8 figs., New York, Columbia University Press, 1926.

1284. Subaqueous terraces of the Great Lakes and the Saint Lawrence embayment (abstract); Geol. Soc. America, Bull., vol. 36, no. 1, p. 136, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 1, p. 77, February, 1925.

1285. Submarine physiography of the Gulf of Maine (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, pp. 148-149, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, p. 148, March, 1925.

1286. William Otis Crosby: Science, new ser., vol. 63, pp. 609-610, June 18 1926,

1287. Field trips in geology: Science, new ser., vol. 64, pp. 396–397, October 22, 1926.

Johnson, Jesse Harlan.

1288. Bibliography of the geology of northeastern Colorado: Colorado School of Mines, 12 pp., January, 1925.

1289. What a geologist means when he says "evolution": Colorado School of Mines, Alumni Mag., vol. 14, no. 9, pp. 8–10, January, 1925.

1290. (and Waldschmidt, W. A.). Famous Colorado mineral localities; Table Mountain and its zeolites: Am. Mineralogist, vol. 10, no. 5, pp. 118-120, May, 1925.

1291. The geology of the Golden area, Colorado: Colorado School of Mines, Quart., vol. 20, no. 3, 25 pp., 3 figs., 3 pls., July, 1925.

1292. Bibliography of the geology of southeastern Colorado: Colorado School of Mines, Circular of Information, 11 pp., August, 1925.

1293. Bibliography of Colorado maps published by the State and Federal governments: Colorado School of Mines, Quart., vol. 20, no. 4, 40 pp., October, 1925.

1294. Some present tendencies in geology; closer study of earth reveals that earlier periods are much more remote than previously believed; science is constantly changing: Colorado School of Mines Mag., vol. 15, no. 7, pp. 11–12, November, 1925.

1295. Bibliography of geophysical principles, apparatus, and methods applied to prospecting: Colorado School of Mines Mag., vol. 15, no. 10, pp. 11–16, 21, February, 1926. [Also reprint, 7 pp.]

1296. Bibliography of the geology and related subjects of northwestern Colorado (revised to June 1, 1926): Colorado School of Mines, Quart., vol. 21, no. 3, 52 pp., July, 1926.

Johnson, J. P.

1297. Meridian and base lines south of Lake St. Joseph, District of Thunder Bay: Ontario Dept. Mines, 33d Ann. Rept., vol. 33, pt. 6, pp. 40–48, illus., 1925.

Johnson, Meredith E.

1298. Mineral resources of the Greensburg quadrangle, Westmoreland County, Pennsylvania: Pennsylvania Geol. Survey, 4th ser., Topog. and Geol. Atlas, no. 37, Greensburg quadrangle, 162 pp., 25 figs. (incl. maps), 9 pls., 4 maps, 1925.

Johnston, William Alfred.

1299. Cedar Creek placers [Cariboo district, British Columbia]: Canadian Min. Jour., vol. 46, no. 5, pp. 117-119, 2 figs., January 30, 1925.

Johnston, William Alfred-Continued.

1300. Gold dredging on Fraser River [British Columbia]; Canadian Min. Jour., vol. 46, no. 9, pp. 229-232, 1 fig., February 27, 1925.

1301. (and Uglow, W. L.). Placer and vein gold deposits of Barkerville, Cariboo district, British Columbia: Canada, Geol. Survey, Mem. 149, 246 pp., 33 figs., 15 pls., map, 1926.

1302. Gold placers of Dease Lake area, Cassiar district, British Columbia; Canada, Geol. Survey, Summ. Rept., 1925, pt. A, pp. 33-74, 5 figs., 3 pls., 1926.

1303. The Pleistocene of Cariboo and Cassiar districts, British Columbia, Canada: Roy. Soc. Canada, Proc. and Trans., 3d ser., vol. 20, pt. 2, sec. 4, pp. 137-147, 1926.

1304. Lack of evidence on the Pacific coast of Canada for a recent sinking of ocean level: Am. Jour. Sci., 5th ser., vol. 12, pp. 249-253, September, 1926.

Johnston, William Drumm, jr.

1305. Fossil hunting in the White River badlands: Sci. Monthly, vol. 22, no. 3, pp. 200-214, 9 figs., March, 1926.

1306. Marcasite inclusions in fluorite from the central Kentucky baritefluorite-calcite veins: Am. Mineralogist, vol. 11, no. 7, pp. 174-180, 4 figs., July, 1926; abstract, Geol. Soc. America, Bull., vol. 36, no. 1, p. 171, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, p. 158, March, 1925.

Jonas, Anna Isabel. See also Stose, 2472, 2473.

1307. (and Stose, George W.). Geology and mineral resources of the New Holland quadrangle, Pennsylvania: Pennsylvania Geol. Survey, 4th ser., Topog. and Geol. Atlas, no. 178, New Holland quadrangle, 40 pp., 5 pls., 2 maps, 1926.

Jones, E. Lester.

1308. Earthquake investigation in the United States: U. S. Coast and Geodetic Survey, serial no. 304, 27 pp., 8 figs., 1925.

1309. Seismological work of the U. S. Coast and Geodetic Survey: Seismological Soc. America, Bull., vol. 15, no. 2, pp. 79-83, June, 1925.

1310. Science and the earthquake peril: Franklin Inst., Jour., vol. 201, no 5, pp. 563-596, 19 figs., May, 1926.

1311. The seismological work of the United States Coast and Geodetic Survey (abstract): Seismological Soc. America, Bull., vol. 16, no. 2, pp. 154-155, June, 1926.

Jones, J. Claude.

1312. The geologic history of Lake Lahontan: Carnegie Inst. Washington, Pub. no. 352 (Quaternary climates), pp. 1-50, 8 figs., 6 pls., July, 1925

Jones, Owen Thomas.

1313. The Ordovician-Silurian boundary in Britain and North America: Jour. Geology, vol. 33, no. 4, pp. 371-388, May-June, 1925; abstract, British Assoc. Adv. Sci., Rept. 92d Meeting, pp. 393-394, 1925.

1314. Notes on the Silurian rocks of Arisaig, Nova Scotia: Am. Jour. Sci., 5th ser., vol. 11, pp. 119-125, February, 1926.

Jones, R. H. B. See also Emmons, 741.

1315. Geology and ore deposits of Hudson Bay Mountain, Coast district, British Columbia: Canada, Geol. Survey, Summ. Rept., 1925, pt. A, pp. 120-143, 1 pl., map, 1926.

Jones, Richard A.

1316. A reconnaissance study of the Salado arch, Nuevo Leon and Tamaulipas, Mexico: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 1, pp. 123–133, 1 fig., January–February, 1925.

1817. An outcrop of surface oil sand in the Permian "red beds" of Coke County, west Texas: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 8, pp. 1215–1216, 1 fig., November, 1925.

1318. Practical application of paleontology to the oil industry: Oil Weekly, vol. 39, no. 13, pp. 37, 40, 76-77, December 18, 1925.

1319. Discoveries renew interest in salt domes of southwest Texas: Oil Weekly, vol. 40, no. 3, pp. 32-34, 36, 2 figs., January 8, 1926.

1320. Subsurface Cretaceous section of southwest Bexar County, Texas: Am.

Assoc. Petroleum Geologists, Bull., vol. 10, no. 8, pp. 768-774,

August, 1926.

Jones, Robert W.

1321. Limestone for Portland cement in Greene County, New York: Eng. and Min. Jour.-Press, vol. 121, no. 20, pp. 805-806, 4 figs., May 15, 1926.

Jones, Walter B.

1322. Statistics of the mineral production of Alabama for 1923: Alabama, Geol. Survey, Bull. no. 29, 106 pp., 1925.

1323. Supplemental list of economic minerals and rocks of Alabama: Alabama Geol. Survey, Bull. no. 30, 15 pp., May 1, 1925.

1324. Index to the mineral resources of Alabama: Alabama Geol. Survey, Bull. no. 28, 250 pp., 15 figs. (maps), 42 pls., 1926.

1325. Statistics of the mineral production of Alabama for 1924: Alabama, Geol. Survey, Bull. no. 32, 123 pp., 1926.

1326. Bauxite in Alabama, with a special discussion of the Margerum district: Econ. Geology, vol. 21, no. 8, pp. 792–802, 2 figs., December, 1926.

Jones, Wellington Downing.

1327. (and Whittlesey, Derwent S.). An introduction to economic geography; Volume I, Natural environment as related to economic life. 375 pp., 366 figs. Chicago, Illinois, The University of Chicago Press [c. 1925].

Jones, William F.

1328. Replacement or displacement by dikes [Medford area, eastern Massachusetts]: Eng. and Min. Jour.-Press, vol. 121, no. 6, p. 250, February 6, 1926.

Jordan, Eric Knight.

1329. (and Herflein, Leo George). A Pliocene fauna from Maria Madre Island, Mexico: California Acad. Sci., Proc., 4th ser., vol. 15, no. 4, pp. 209-216, 1 pl., April 26, 1926.

1330. Molluscan fauna of the Pleistocene of San Quintin Bay, Lower California: California Acad. Sci., Proc., 4th ser., vol. 15, no. 7, pp. 241–254, 1 fig., 1 pl., April 26, 1926.

1331. (and Hertlein, Leo George). Contribution to the geology and paleon-tology of the Tertiary of Cedros Island and adjacent parts of Lower California: California Acad. Sci., Proc., 4th ser., vol. 15, no. 14, pp. 409–464, 1 fig., 8 pls., July 22, 1926.

Jordan, David Starr.

1332. A collection of fossil fishes in the University of Kansas from the Niobrara formation of the Cretaceous: Kansas Univ. Sci. Bull., vol. 15, no. 6, pp. 219–245, 11 pls., December, 1924.

1333. The fossil fishes of the Miocene of southern California: Stanford Univ. Pub., Univ. ser., Biol. Sciences, vol. 4, no. 1, 51 pp., 21 pls., 1925.

1334. New sharks from the Temblor group in Kern County, California: California Acad. Sci., Proc., 4th ser., vol. 15, no. 8, pp. 257-261, 1 pl., April 26, 1926.

R., C. W.

1335. Reminiscences of Willet G. Miller: Canadian Inst. Min. and Met., Bull.

no. 157, pp. 534-559, 11 pls. (portr.), May, 1925; Trans., vol. 28,

pp. 19-44, 11 pls. (portr.) [1926].

Kalb, Georg.

1336. Erzmikroskopische Untersuchung des Castillit: Centralbl. Mineralogie, no. 18, pp. 545-547, 3 figs., September 15, 1923. Examen microscópico de la castillita: Soc. cient. "Antonio Alzate," Mem. y rev., t. 44, nos. 3-8, pp. 351-354, 3 figs., 1925.

Kato, Takeo.

1337. The problem of the cupriferous pyritic deposits: Econ. Geology, vol. 20, no. 1, pp. 97-100, January-February, 1925.

1338. Replacement copper ore deposits in quartzite: Econ. Geology, vol. 21, no. 4, pp. 394-396, June-July, 1926.

Katz, Frank J.

1339. Abrasive materials in 1923: U. S. Geol. Survey, Mineral Resources, 1923, pt. 2, pp. 327–337, January 28, 1925.

Kay, George Frederick.

1340. Some recent interpretations of glacial deposits in Iowa (abstract):
British Assoc. Adv. Sci., Rept. 92d Meeting, p. 381, 1925.

1341. Some recent Pleistocene studies in Iowa [particularly the Iowan till]

(abstract): Pan-Am. Geologist, vol. 46, no. 5, p. 404, December,
1926.

Keith, Arthur. See also LaForge, 1513.

1342. Memorial of Jay Backus Woodworth: Geol. Soc. America, Bull., vol. 37, no. 1, pp. 134-141, 1 pl. (portr.), March 30, 1926.

1343. The geology of the St. Lawrence earthquake of February 28, 1925 (abstract): Seismological Soc. America, Bull., vol. 16, no. 2, p. 158, June, 1926.

Kelley, P. K.

1344. The Sulphur salt dome, Louisiana: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 3, pp. 479-496, 7 figs., 1 pl., May-June, 1925; Geology of salt dome oil fields, pp. 452-469, 7 figs., 1 pl., 1926.

Kellogg, Remington.

1345. A fossil physeteroid cetacean from Santa Barbara County, California: U. S. Nat. Mus., Proc., vol. 66, art. 27, 8 pp., 2 pls., February 28, 1925.

1346. Additions to the Tertiary history of the pelagic mammals on the Pacific coast of North America: Carnegie Inst. Washington, Pub. no. 348, 120 pp., 29 figs., 13 pls., April, 1925.

Kellogg, Remington-Continued.

1347. On the occurrence of remains of fossil porpoises of the genus *Eurhino-delphis* in North America: U. S. Nat. Mus., Proc., vol. 66, art. 26, 40 pp., 1 fig., 17 pls., May 23, 1925.

1348. Supplementary observations on the skull of the fossil porpoise Zarhachis flagellator Cope: U. S. Nat. Mus., Proc., vol. 67, art. 28, 18 pp., 5 pls., February 24, 1926.

1349. [Paleontological research on cetaceans]: Carnegie Inst. Washington, Year Book no. 25, 1925-6, pp. 405-407, December, 1926.

Kellum, Lewis Burnett.

1350. The age of the Trent marl in North Carolina: Jour. Geology, vol. 33, no. 2, pp. 193-187, February-March, 1925.

1351. Paleontology and stratigraphy of the Castle Hayne and Trent marls in North Carolina: U. S. Geol. Survey, Prof. Paper 143, 56 pp., 1 fig., 11 pls., 1926.

Kelly, Sherwin F.

1352. The microstructure of anthracite and anthraxolite: Toronto, Univ., Studies, Geol. ser., no. 32, pp. 44-47, 1 pl., 1926.

Kemp, James Furman. See also Lindgren, 1588; Miller, 1789.

1353. Memorial of Edmund Otis Hovey: Geol. Soc. America, Bull., vol. 36, no. 1, pp. 85-100, portr., March 30, 1925.

1354. (and Knight, S. H.). Pre-Cambrian geology north of Laramie, Wyoming (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, pp. 159-160, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, p. 153, March, 1925.

1355. First award of the Penrose medal [to T. C. Chamberlin]: Science, new ser., vol. 61, pp. 381–382, April 10, 1925.

1356. (and Alling, Harold L.). Geology of the Ausable quadrangle: New York State Mus. Bull., no. 261, 126 pp., 24 figs., 12 pls., map, June, 1925.

1357. New methods for the study of granitic intrusives: Econ. Geology, vol. 20, no. 6, pp. 597-601, September-October, 1925.

1358. Recent physiographic observations in the Laramie Range, Wyoming (abstract): Science, new ser., vol. 62, p. 520, December 4, 1925.

1359. General geological relations of platinum: Eng. and Min. Jour.-Press, vol. 121, no. 8, pp. 717–719, May 1, 1926.

1360. The international geological congresses: Econ. Geology, vol. 21, no. 7, pp. 708–711, November, 1926.

Kennedy, William.

1361. The Bryan Heights salt dome, Brazoria County, Texas: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 3, pp. 613-625, 6 figs., May-June, 1925; Geology of salt dome oil fields, pp. 678-690, 6 figs., 1926.

Kentucky Geological Survey.

1362. Geologic map of Kentucky showing oil, gas, coal, asphalt, and fluorspar fields, by Willard Rouse Jillson: Kentucky Geol. Survey, Ser. 6, 1925. Scale, 1 inch=30 miles.

1363. Map of the geology of Adair County, Kentucky, by A. M. Miller: Kentucky Geol. Survey, Ser. 6, 1924. Scale, 1:62,500.

1364. Oil and gas map of Barren County, Kentucky, by W. C. Eyl: Kentucky Geol. Survey, Ser. 6, 1925. Scale 1 inch=1 mile.

Kentucky Geological Survey-Continued.

4

- 1365. Map of the structural geology of Boyd County, Kentucky; structural geology by J. S. Hudnall: Kentucky Geol. Survey, Ser. 6, 1924. Scale 1:62,500.
- 1366. Map of the subsurface structural geology of Boyd County, by W. R. Jillson: Kentucky Geol. Survey, Ser. 6, 1925. Scale 1:62,500.
- 1367. Oil and gas map of Boyd County, Kentucky, by W. R. Jillson: Kentucky Geol. Survey, Ser. 6, 1925. Scale 1:62,500.
- 1368. Oil and gas map of Bracken County, Kentucky, by Evans McGraw and Earl Sherwood: Kentucky Geol. Survey, Ser. 6, 1926. Scale 1 inch=1 mile.
- 1369. Structural map of Carter County, Kentucky: Kentucky Geol. Survey, Ser. 6, 1925. Scale, 1 inch=1 mile.
- 1370. Map of the structural geology of parts of Cumberland, Monroe, and Clinton counties, Kentucky; structural geology by J. S. Hudnall and G. W. Pirtle: Kentucky Geol. Survey, Ser. 6, 1924. Scale, 1 inch=1 mile.
- 1371. Map of Edmonson County, Kentucky [showing geologic data]: Kentucky Geol. Survey, Ser. 6, 1926. Scale, 1:62,500.
 - 1372. Oil and gas map of Elliott County, Kentucky, by A. B. Williams: Kentucky Geol. Survey, Ser. 6, 1925. Scale, 1 inch=1 mile.
 - 1373. Map of the structural geology of Floyd County, Kentucky; structural geology by J. S. Hudnall: Kentucky Geol. Survey, Ser. 6, 1922. Scale, 1:62,500.
- 1374. Map of Grayson County, Kentucky [showing geologic data]: Kentucky Geol. Survey, Ser. 6, 1926. Scale, 1 inch=1 mile.
- 1375. Reconnaissance structural oil and gas map of Greenup County, Kentucky: Kentucky Geol. Survey, Ser. 6, 1926. Scale, 1 inch=1 mile.
- 1376. Oil and gas map of Hancock County, Kentucky, by J. L. Bissell: Kentucky Geol. Survey, Ser. 6, 1924. Scale, 1:62,500.
- 1377. Map of the geology of the Hartford quadrangle, Ohio, Butler, and Muhlenberg counties, Kentucky, by James H. Gardner: Kentucky Geol. Survey, Ser. 6, 1925. Scale, 1:62,500.
- 1378. Geological map of Hopkins County, Kentucky, compiled by C. V. Theis: Kentucky Geol. Survey, Ser. 6, 1924. Scale, 1:62,500.
- 1379. Map of the structural geology of the region south of Irvine and Berea in Estill, Jackson, Lee, Madison, and Rockcastle counties, Kentucky: Kentucky Geol. Survey, Ser. 6, 1924. Scale, 1 inch=1 mile.
- 1380. Structural map Isonville oil pool, Elliott County, Kentucky, by J. S. Hudnall and A. E. Williams: Kentucky Geol. Survey, Ser. 6, 1924. Scale, 1 inch=½ mile.
- 1381. Map of the structural geology of Johnson County . . . by I. B. Browning: Kentucky Geol. Survey, Ser. 6, 1921. Scale, 1:62,500.
- 1382. Reconnaissance map of the structural geology of Knox County, Kentucky; structural geology by C. V. Theis: Kentucky Geol. Survey, Ser. 6, 1925. Scale, 1: 62,500.
- 1383. Structural map of Lawrence County, Kentucky: Kentucky Geol. Survey, Ser. 6, 1926. Scale, 1 inch=1 mile.
- 1384. Map of the structural geology of Leslie County, Kentucky . . . by J. S. Hudnall and others. Kentucky Geol. Survey, Ser. 6, 1924. Scale, 1:62,500.

- Kentucky Geological Survey-Continued.
 - 1385. Geological map of Lewis County, Kentucky, by E. S. Perry: Kentucky Geol. Survey, Ser. 6, 1925. Scale, 1 inch=1 mile.

4

- 1386. Map of the areal and structural geology (fault pattern) of Livingston County, Kentucky, by Stuart Weller and others: Kentucky Geol. Survey, Ser. 6, 1926. Scale, 1 inch=1 mile.
- 1387. Reconnaissance geological map of Lyon County, Kentucky, by J. K. Roberts, Stuart Weller, and others: Kentucky Geol. Survey, Ser. 6, 1926. Scale, 1 inch=1 mile.
- 1388. Economic map of McLean County, Kentucky, by J. L. Bissell: Kentucky Geol. Survey, Ser. 6, 1924. Scale, 1:62,500.
- 1389. Map of the structural geology of Magoffin County . . . by I. B. Browning; Kentucky Geol. Survey, Ser. 6, 1921. Scale, 1: 62,500.
- 1390. Map of the structural geology of Martin County, Kentucky; structural geology by J. S. Hudnall: Kentucky Geol. Survey, Ser. 6, 1923.

 Scale, 1:62,500.
 - 1391. Map of the subsurface structural geology of Martin County, Kentucky; structural geology by J. S. Hudnall: Kentucky Geol. Survey, Ser. 6, 1924. Scale, 1:62,500.
- 1392. Map of Metcalfe County, Kentucky, by H. D. Crider [oil and gas data]:

 Kentucky Geol. Survey, Ser. 6, 1924. Scale, 1 inch=1 mile.
 - 1393. Map of Monroe County, Kentucky, by G. W. Pirtle [oil and gas data]:
 Kentucky Geol. Survey, Ser. 6, 1923. Scale, 1 inch=1 mile.
 - 1394. Map of the areal and structural geology of Morgan County. Kentucky; areal geology by L. C. Robinson: Kentucky Geol. Survey, Ser. 6, 1925. Scale, 1 inch=1 mile.
- 1395. Topographic map of Muhlenberg County, Kentucky [incl. geologic data]: Kentucky Geol. Survey, Ser. 6, 1924. Scale, 1:62,500.
- 1396. Map of the structural geology of the Paint Creek uplift in Floyd, Johnson, Magoffin, Morgan, Lawrence, and Elliott counties, Kentucky; structural geology by J. S. Hudnall and I. B. Browning: Kentucky Geol. Survey, Ser. 6, 1924. Scale, 1:62,500.
 - 1397. Map of the structural geology of Perry County, Kentucky; structural geology by J. S. Hudnall: Kentucky Geol. Survey, Ser. 6, 1924. Scale, 1:62,500.
 - 1398. Map of the structural geology of Pike County, Kentucky; structural geology by J. S. Hudnall: Kentucky Geol. Survey, Ser. 6, 1923. Scale, 1:62,500.
 - 1399. Map of the Rockcastle River uplift in Laurel and Clay counties, Kentucky, by W. R. Jillson and J. S. Hudnall: Kentucky Geol. Survey, Ser. 6, 1923. Scale 1: 62,500.
 - 1400. Oil and gas map of Taylor County, Kentucky, by C. D. Hunter: Kentucky Geol. Survey, Ser. 6, 1925. Scale 1 inch=1 mile.
 - 1401. Map of the Williamsburg anticline in Whitley County, Kentucky, by W. R. Jillson and J. S. Hudnall [incl. geologic data]: Kentucky Geol. Survey, Ser. 6, 1923. Scale 1:62,500.
- 1402. Map of the geology of Woodford County, Kentucky, by A. M. Miller: Kentucky Geol. Survey, Ser. 6, 1924. Scale 1:62,500.
- Kerr, F. A.
 - 1403. Dease Lake area, Cassiar district, British Columbia: Canada, Geol. Survey, Summ. Rept., 1925, pt. A, pp. 75–99, 1 fig., 1 pl., map, 1926.

Kerr, Paul F.

- 1404. (and Schenck, Hubert G.). Active thrust faults in San Benito County, California: Geol. Soc. America, Bull., vol. 36, no. 3, pp. 465-494, 13 figs., September 30, 1925; abstract, no. 1, p. 157, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, p. 152, March, 1925.
- 1405. (and Cabeen, Charles K.). Electrical conductivity of ore minerals: Econ. Geology, vol. 20, no. 8, pp. 729-737, December, 1925.
- 1406. The significance of strain structure in quartz from Ducktown, Tennessee: Am. Mineralogist, vol. 11, no. 8, pp. 206–209, 2 figs., August, 1926.

Kerr-Lawson, D. E.

1407. The crystallography of potassium fluozirconate: Toronto, Univ., Studies, Geol. ser., no. 20, pp. 63-67, 3 figs., 1925.

Kew, William Stephen Webster.

- 1408. A geologic summary of California oil fields: Oil Bull., vol. 12, no. 1 pp. 33-35, 39, 41, 43, 1 pl., January, 1926.
- 1409. Geologic and physiographic features in the San Pedro Hills, Los Angeles County, California: Oil Bull., vol. 12, no. 5, pp. 513-518, 3-figs., May, 1926.

Keyes, Charles Rollin. See also Beeson, 162.

- 1410. The crystule; a unit measure of matter: Am. Mineralogist, vol. 10, no. 1, pp. 15-17, January, 1925. Crystule; the ultimate unit of crystal form: Pan-Am. Geologist, vol. 43, no. 1, pp. 69-71, February, 1925.
- 1411. Iron streak in the loess: Pan-Am. Geologist, vol. 43, no. 1, pp. 71–72, February, 1925.
- 1412. Thomas Leonard Watson: Pan-Am. Geologist, vol. 43, no. 2, pp. 81-84, portr., March, 1925.
- 1413. Shagreened terrene of Wyoming: Pan-Am. Geologist, vol. 43, no. 2, pp. 105-138, 2 figs., 3 pls., March, 1925.
- 1414. Bibliography of isostasy: Pan-Am. Geologist, vol. 43, no. 2, pp. 139-143, March, 1925.
- 1415. Our missing Permian (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 162, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, pp. 155-156, March, 1925.
- 1416. Alfred Hulse Brooks, Alaskan pioneer: Pan-Am. Geologist, vol. 43, no. 3, pp. 161–174, portr., 1 pl., April, 1925.
- 1417. Homonymy—identity of geological relations: Pan-Am. Geologist, vol. 43, no. 3, pp. 217-224, April, 1925.
- 1418. Revise Eocene classification of the Cordillera: Pan-Am. Geologist, vol. 43, no. 3, pp. 225-230, April, 1925.
- 1419. Evolutional stages in geologic classification; Devonic crinoids of New York; Iowa and its wealth of crinoids; Note on synonymy of Onychopus; Basis of species; Pan-Am, Geologist, vol. 43, no. 3, pp. 231-233, 234-235, 237-238, 239, 239-240, April, 1925.
- 1420. Willet Green Miller, Canadian pre-Cambrianist: Pan-Am. Geologist, vol. 43, no. 4, pp. 241–256, portr., May, 1925.
- 1421. Mid-Cretacic deposition of epicontinental seas: Pan-Am. Geologist, vol. 43, no. 4, pp. 287-302, 3 pls., May, 1925.

Keyes, Charles Rollin-Continued.

- 1422. Proper designation of Iowa coal measures; Basal quartzites of Cordilleran massif; Title of Fernando formation of California; Provincial affinities of Sweetland black shales of Iowa: Pan-Am. Geologist, vol. 43, no. 4, pp. 309-311, 313-315, 315-316, 317-318, 1 pl., May. 1925.
- 1423. Early geological explorations of Joseph Nicholas Nicollet in the Mississippi Valley: Pan-Am. Geologist, vol. 43, no. 5, pp. 321–332, portr., June, 1925.
 - 1424. John Mason Clarke, paleontologist: Pan-Am. Geologist, vol. 44, no. 1, pp. 1-16, portr., August, 1925.
 - 1425. Regional planations about the Mesozoic-Cenozoic boundary: Pan-Am. Geologist, vol. 44, no. 1, pp. 43-52, 2 figs., August, 1925.
 - 1426. Out on the Cretaceo-Tertic border: Pan-Am. Geologist, vol. 44, no. 1, pp. 53-56, August, 1925.
- 1427. Gashed veins on the Queen of Sheba [Arizona]; Vanadinite deposits of the Elephant Butte [New Mexico]: Pan-Am. Geologist, vol. 44, no. 1, pp. 60-62, 67-68, August, 1925.
- 1428. William Maclure, father of modern geology: Pan-Am. Geologist, vol. 44, no. 2, pp. 81-94, portr., September, 1925.
 - 1429. Periodicity of glaciation: Pan-Am. Geologist, vol. 44, no. 2, pp. 139–142, 1 fig., September, 1925.
 - 1430. Isostasy versus tumefaction: Pan-Am. Geologist, vol. 44, no. 2, pp. 143-146. September, 1925.
 - 1431. Earliest geographic designation for Iowa chalk; Nicollet's title for Spergen limestone: Pan-Am. Geologist, vol. 44, no. 2, pp. 147-149, 149-151. September, 1925.
 - 1432. Oldest unmetamorphosed rocks are around Pacific Basin: Pan-Am. Geologist vol. 44, no. 3, pp. 207–224, 3 pls., October, 1925.
 - 1433. Secular wasting of glacial till sheets; Standardization of American terranal classification; Origin of the continents: Pan-Am. Geologist, vol. 44, no. 3, pp. 225-227, 227-232, 232-234, October, 1925.
 - 1434. Louis Agassiz and glacial hypothesis: Pan.-Am. Geologist, vol. 44, no. 4, pp. 241-252, portr., November, 1925.
 - 1435. Isostatic quest of the Holy Grail: Pan-Am. Geologist, vol. 44, no. 4, pp. 313-316, November, 1925.
 - 1436. Norton bronze tablet: Pan-Am. Geologist, vol. 44, no. 5, pp. 337-344, 3 pls. (incl. portr.), December, 1925.
 - 1437. Astronomical theory of great ice ages; and Newcombian criticism:
 Pan-Am. Geologist, vol. 44, no. 5, pp. 397-406, 1 pl., December, 1925.
 - 1438. Early Devonic planation in continental interior (abstract): Iowa Acad-Sci., Proc., vol. 31, pp. 331-332 [1926?]
 - 1439. Beginnings of desert in Iowa (abstract): Iowa Acad. Sci., Proc., vol. 31, pp. 332–333 [1926?].
 - 1440. Pennsylvanian as a periodic title for Iowa coal measures: Iowa Acad. Sci., Proc., vol. 31, pp. 351-352 [1926?]
 - 1441. Rogers of the folded mountains: Pan-Am. Geologist, vol. 45, no. 1, pp. 1-14, portr., February, 1926.
 - 1442. Glacial control; and recalculated values of earth's orbital excentricity:
 Pan.-Am. Geologist, vol. 45, no. 1, pp. 49-74, 1 fig., 3 pls., February,
 1926.
- 1443. Present status of astronomical theory of glacial epochs: Pan-Am. Geologist, vol. 45, no. 2, pp. 141–148, March, 1926.

Keyes, Charles Rollin—Continued.

- 1444. How shall we classify our glacial till sheets: Pan-Am. Geologist, vol. 45, no. 2, pp. 149–152, March, 1926.
- 1445. New geological map of Kentucky; Expansion of seismological interest; Motion picture in geography and geology: Pan.-Am. Geologist, vol. 45, no. 2, pp. 152–154, 154–155, 155–156, March, 1926.
- 1446. Estival epoch; the contrasted analogue of an ice age: Pan-Am. Geologist, vol. 45, no. 3, pp. 225-236, April, 1926.
- 1447. Westward extension of the Uintah arch; Geological mapping of Arizona: Pan-Am. Geologist, vol. 45, no. 3, pp. 243-245, 245-246, April, 1926.
- 1448. Crollian composition of climate and time: Pan-Am. Geologist, vol. 45, no. 4, pp. 307-318, May, 1926.
- 1449. Geological message of the jaundiced snow: Pan-Am. Geologist, vol. 45, no. 4, pp. 319-320, May, 1926.
- 1450. Geological date of Red Oak faulting; Tectonic significance of transverse horizontal faulting in desert ranges; Tectonic framework of desert ranges: Pan-Am. Geologist, vol. 45, no. 4, pp. 321–324, 324–326, 326–328, May, 1926.
- 1451. Forgotten geological map of Minnesota and its belated tectonic significance: Pan-Am. Geologist, vol. 45, no. 4, pp. 328-334, 1 fig., 2 pls. (maps), May, 1926.
- 1452. Complications of the glacial cycle: Pan-Am. Geologist, vol. 45, no. 5, pp. 337-348, 1 fig., June, 1926.
- 1453. Regional creep of earth's crust and prediction of earthquakes: Pan-Am. Geologist, vol. 46, no. 1, pp. 63-66, August, 1926.
- 1454. Mechanism of glacial recessional moraines: Pan-Am. Geologist, vol. 46, no. 2, pp. 123–136, 2 figs., 2 pls., September, 1926.
- 1455. Stability in geological nomenclature: Pan-Am. Geologist, vol. 46, no. 2, pp. 137-144, September, 1926.
- 1456. Ancient rock column of Montana: Pan-Am. Geologist, vol. 46, no. 3, pp. 195–232, 3 figs., 4 pls., October, 1926.
- 1457. Desmesne of economic geology: Pan-Am. Geologist, vol. 46, no. 3, pp. 233-238, October, 1926.
- 1458. Astronomical measure of geologic time (abstract): Pan-Am. Geologist, vol. 46, no. 3, pp. 250-251, October, 1926.
- 1459. Our first genetic classification of rocks; Pan-Am. Geologist, vol. 46, no. 4, pp. 315-316, November, 1926.
- 1460. Why a Glacial prial? [number of glacial stages]: Pan-Am. Geologist, vol. 46, no. 5, pp. 393-398, December, 1926.
- 1461. Taxonomy of Iowa's glacial deposits (abstract): Pan-Am. Geologist, vol. 46, no. 5, p. 400, December, 1926.
- 1462. Terranal affinities of Iowa chalks (abstract): Pan-Am. Geologist, vol. 46, no. 5, pp. 400–401, December, 1926.
- 1463. Water table of the loess (abstract): Pan-Am. Geologist, vol. 46, no. 5, p. 401, December, 1926.
- 1464. Controlling cause of periodic glaciation (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, pp. 177–178, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 1, pp. 93–94, February, 1926.
- 1465. Translocation of Iowa's Siouan Mountains (abstract): Iowa Acad. Sci., Proc., 1925, vol. 32, p. 361 [1926].
- 1466. New method of precise geological correlation; Stratigraphic value of volcanic ash (abstract): Iowa Acad. Sci., Proc., 1925, vol. 32, p. 362 [1926].

Keyes, Mary G. See also Washington, 2737.

1467. Making thin sections of rocks; Am. Jour. Sci., 5th ser., vol. 10, pp. 538-550, 1 fig., December, 1925.

Keyes, R. L. See Godde, 923.

Keyte, I. A.

1468. Pennsylvanian crinoids from western Colorado (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 227, March 30, 1925.

Kindle, Edward Martin. See also Twenhofel, 2599, 2603.

1469. The bottom deposits of Lake Ontario: Roy. Soc. Canada, Proc. and Trans., 3d ser., vol. 19, sec. 4, pp. 47-102, 1 fig., 3 pls., 3 maps, 1925.

1470. A note on rhizocretions: Jour. Geology, vol. 33, no. 7, pp. 744-746, 1 fig., October-November, 1925.

1471. Certain types of sedimentation now in progress on or near the Atlantic coast of North America (abstract); British Assoc. Adv. Sci., Rept. 92d Meeting, p. 391, 1925.

1472. Contrasted types of mud cracks: Roy. Soc. Canada, Proc. and Trans., 3d ser., vol. 20, sec. 4, pp. 71-75, 5 pls., 1926.

1473. The occurrence of the genus *Leptodus* in the anthracolithic fauna of British Columbia: Roy. Soc. Canada, Proc. and Trans., 3d ser., vol. 20, pt. 2, sec. 4, pp. 109–111, 1 fig., 1926.

1474. A comparison of recent and late Champlain stages of McKay Lake as diatom habitats: Canadian Field-Naturalist, vol. 40, no. 4, pp. 83-84, April, 1926.

1475. Some fossils in the Dominion National Museum: Canadian Min. Jour., vol. 47, no. 18, pp. 465-466, 3 figs., April 30, 1926.

1476. The story of the stones in the Dominion Parliament Building: Canadian Min. Jour., vol. 47, no. 28, pp. 689-691, 3 figs., July 9, 1926; Sci. Monthly, vol. 23, no. 6, pp. 539-544, 4 figs., December, 1926.

1477. Notes on the tidal phenomena of Bay of Fundy rivers: Jour. Geology, vol. 34, no. 7, pp. 642-652, 3 figs., October-November, 1926.

King, Philip B.

1478. The geologic structure of a portion of the Glass Mountains of west Texas: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 9, pp. 877–884, 2 figs., 1 pl. (map), September, 1926.

1479. Notes on the physiography of southwestern North Dakota (abstract): Iowa Acad. Sci., Proc., vol. 31, p. 333 [1926?].

Kirk, Edwin.

1480. Harpidium, a new pentameroid brachiopod genus from southeastern Alaska: U. S. Nat. Mus., Proc., vol. 66, art. 32, 7 pp., 2 pls., April 11, 1925.

1481. Notes on an early collection of Paleozoic fossils from Ellesmereland:
Am. Jour. Sci., 5th ser., vol. 10, pp. 445–447, November, 1925.

1482. Cymbidium, a new genus of Silurian pentameroid brachiopods from Alaska: U. S. Nat. Mus., Proc., vol. 69, art. 23, 5 pp., 1 pl., 1926.

Kirkham, Virgil Raymond Drexel. See also Piper, 2004.

1483. Phosphate deposits of Idaho and their relation to the world supply:

Am. Inst. Min. and Met. Eng., Trans. [preprint], no. 1405, 28
pp., 16 figs., January, 1925; (with discussion), Trans., vol. 71,
pp. 308-338, 16 figs., 1925; abstract, Mining and Metallurgy, vol. 6,
no. 221, pp. 247-248, May, 1925.

Kirkham, Virgil Raymond Drexel-Continued.

1484. Oil possibilities of southeastern Idaho: Mining and Metallurgy, vol. 6, no. 218, pp. 71-74, 5 figs., February, 1925.

1485. Some adverse influences of glaciation on mining: Eng. and Min. Jour .-Press, vol. 121, no. 26, pp. 1046-1049, 9 figs., June 26, 1926.

1486. (and Ellis, Ernest W.). Geology and ore deposits of Boundary County, Idaho: Idaho Bur. Mines and Geology, Bull. no. 10, 78 pp., 13 pls. (incl. maps), November, 1926.

1487. Ground water for municipal supply at St. Maries, Idaho: Idaho, Bur. Mines and Geology, Pam. no. 17, 11 pp., 1 pl. (map), November, 1926. [Mimeographed.]

Kitchin, F. L.

1488. The so-called Malone Jurassic formation in Texas: Geol. Mag., vol. 63, pp. 454-469, October, 1926. 1508. Edward Fuller Holden

Kithil, Karl L.

1489. Prospecting by the earth-wave travel method: Eng. and Min. Jour., vol 122, no. 24, pp. 931-936, 7 figs., December 11, 1926.

Kitson, Howard W. See Cunningham, 567.

Knappen, Russell Stafford.

1490. Geology and mineral resources of the Dixon quadrangle; Illinois State Geol. Survey, Bull. no. 49, 141 pp., 20 figs., 5 pls. (incl. maps), 1926.

Knight, Cyril Workman.

1491. Lightning River gold area: Ontario Dept. Mines, 33d Ann. Rept., vol. 33, pt. 3, pp. 41-49, 1 pl., 1925.

Knight, Nicholas.

1492. Iowa glass sand (abstract): Pan-Am. Geologist, vol. 46, no. 5, pp. 402-403, December, 1926.

Knight, S. H. See Kemp, 1354.

Kniker, Hedwig T. See Beede, 159; Applin, 66.

Knopf, Adolph.

1493. Discovery of andalusite in California; Eng. and Min. Jour.-Press, vol. 120, no. 20, p. 778, November 14, 1925.

1494. Recent developments in the Aspen district, Colorado: U. S. Geol. Survey, Bull. 785, pp. 1-28, 6 figs., 1 pl. (map), March 30, 1926.

Knowlton, Frank Hall.

1495. The possible origin of the angiosperms: Science, new ser., vol. 61, pp. 568-570, May 29, 1925.

1496. Evidence of fossil plants to climatic zoning in Mesozoic times (abstract): Pan-Am. Geologist, vol. 44, no. 1, pp. 69-70, August, 1925.

1497. Flora of the Latah formation of Spokane, Washington, and Coeur d'Alene, Idaho: U. S. Geol. Survey, Prof. Paper 140, pp. 17-81, 24 pls., February 19, 1926.

Koch, Lauge.

1498. The geology of north Greenland: Am. Jour. Sci., 5th ser., vol. 9, pp. 271-286, 5 figs., April, 1925.

100 BIBLIOGRAPHY OF NORTH AMERICAN GEOLOGY, 1925-1926

Koch, Lauge-Continued.

1499. Ice cap and sea ice in north Greenland: Geog. Rev., vol. 16, no. 1, pp. 98-107, 2 figs., January, 1926.

1500. A new fault zone in northwest Greenland: Am. Jour. Sci., 5th ser., vol. 12, pp. 301-310, 2 figs., October, 1926.

Kovarik, A. F.

1501. (and McKeehan, L. W.). Radioactivity [VII, Radioactivity in geology and cosmology, pp. 135–152]: Nat. Research Council, Bull., vol. 10, pt. 1, no. 51, 203 pp., 1925.

Kratzert, T. See Wittich, 2860.

Kraus, Edward Henry.

1502. (and Holden, Edward Fuller). Gems and gem materials. vii, 222 pp., 256 figs., New York, McGraw-Hill Book Company, 1925.

1503. Edward Fuller Holden: Science, new ser., vol. 63, pp. 84–85, January 22, 1926.

1504. Memorial of Edward Fuller Holden: Am. Mineralogist, vol. 11, no. 3, pp. 57-59, portr., March, 1926.

Krejci, Milo W.

1505. Ancient man in Nevada: Eng. and Min. Jour., vol. 122, no. 3, p. 103, July 17, 1926.

Krey, Frank.

1506. (and Lamar, J. E.). Limestone resources of Illinois: Illinois State Geol. Survey, Bull. no. 46, 392 pp., 70 figs., 1925.

Kümmel, Henry Barnard. See Miller, 1789.

Kuhn, Olin R.

1507. How much coal is left in Pennsylvania?: Coal Age, vol. 27, no. 6, pp. 209-214, 6 figs., February 5, 1925.

1508. Iron ore deposits of Cuba: Eng. and Min. Jour.-Press, vol. 121, no. 15, pp. 607-610, 5 figs., April 10, 1926.

Kupferbürger, W.

1509. Danburite from La Sirena, near Zimapan, Mexico: Am. Mineralogist, vol. 10, no. 1, pp. 14-15, January, 1925.

Ladd, Harry S. See also Stainbrook, 2423; Thomas, 2532.

1510. Depauperate fauna of the Maquoketa (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 228, March 30, 1925.

1511. Notes on the geology of Jackson County, Iowa: Iowa Acad. Sci., Proc., vol. 31, pp. 341–345 [1926?].

Ladoo, Raymond B.

1512. Nonmetallic minerals; occurrence, preparation, utilization. 686 pp., 51 figs., McGraw-Hill Book Company, New York, 1925.

LaForge, Laurence.

1513. (and Cooke, Wythe, Keith, Arthur, and Campbell, Marius). Physical geography of Georgia; with an introduction by S. W. McCallie: Georgia Geol. Survey, Bull. no. 42, 189 pp., 6 figs., 43 pls., 1925.

Lago, Manuel García. See also Roque Allende, 2150.

1514. Minas de "Asiento Viejo"; estudio del yacimiento de la mina "Celia Gregoria": Cuba, Dirección de montes y minas, Bol. minas, no. 8, pp. 57-60, August, 1925.

La Gorce, John Oliver.

1515. Pirate rivers and their prizes: Nat. Geog. Mag., vol. 50, no. 1, pp. 87-132, 44 figs., July, 1926.

Lahee, Frederic Henry. See also Foley, 819.

1516. The Wortham and Lake Richland faults [Texas]: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 1, pp. 172–175, 2 figs., January–February, 1925.

1517. Comparative study of well logs on the Mexia type of structure: Am. Inst. Min. and Met. Eng., Trans. [preprint], no. 1396, 21 pp., 16 figs., February, 1925; (with discussion), Trans., vol. 71, pp. 1329–1350, 16 figs., 1925; abstract, Mining and Metallurgy, vol. 6, no. 220, pp. 203–205, 1 fig., April, 1925.

1518. The rate of solution of gypsum: Jour. Geology, vol. 33, no. 5, pp. 548-

549, July-August, 1925.

1519. Further notes on the origin and nature of the Currie structure, Navarro County, Texas: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 1, pp. 61-71, 6 figs., January, 1926.

Lamar, John Everts. See also Krey, 1506.

1520. Geology and mineral resources of the Carbondale quadrangle: Illinois State Geol. Survey, Bull. no. 48, 172 pp., 28 figs., 5 pls. (incl. maps), 1925.

1521. Glacial phenomena in the vicinity of Carbondale: Illinois State Acad. Sci., Trans., vol. 17, pp. 181–186, 1925.

1522. The oolite of the Ste. Genevieve formation: Illinois State Acad. Sci., Trans., vol. 18, pp. 409-413, 5 pls., 1925.

1523. Preliminary report on the economic mineral resources of Calhoun County: Illinois State Geol. Survey, Rept. Investigations no. 8, 21 pp., 1 fig., 1926.

1524. Sedimentary analysis of the limestones of the Chester series: Econ. Geology, vol. 21, no. 6, pp. 578-585, 3 figs., September, 1926.

Lamb, Horace.

1525. The constitution of the earth: Science, new ser., vol. 62, pp. 229-236, September 11, 1925.

1526. Physical constitution of the earth: Pan-Am. Geologist, vol. 44, no. 5, pp. 345-356, December, 1925.

Landes, Kenneth K.

1527. The paragenesis of the granite pegmatites of central Maine: Am. Mineralogist, vol. 10, no. 11, pp. 355-411, 5 figs., 7 pls., November, 1925.

Lane, Alfred Church.

1528. Measurement of geological age by atomic disintegration: Lake Superior Min. Inst., Proc., 24th Ann. Meeting, vol. 24, pp. 106-116, 1925; abstract, Pan-Am. Geologist, vol. 45, no. 2, pp. 157-158, March, 1926.

1529. Laurentian problems and atomic disintegration: Canadian Inst. Min. and Met., Bull. no. 157, pp. 484–508, May, 1925; Trans., vol. 28, pp. 102–129 [1926].

1530. On the relative ages of pre-Cambrian rocks: Canadian Min. Jour., vol. 46, no. 24, pp. 579-581, June 12, 1925.

1531. The age of the earth and the oceans (abstract): Washington Acad. Sci.,
Jour., vol. 15, no. 13, pp. 304-305, July 19, 1925.

Lane, Alfred Church—Continued.

1532. Graphs of rock analyses (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 148, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 1, p. 96, February, 1926.

1533. Geologic age calculations: Science, new ser., vol. 64, p. 119, July 30, 1926.

1534. Nathaniel Southgate Shaler (1841–1906): Am. Acad. Arts and Sci., Proc., vol. 61, pp. 557–561, November, 1926.

Lane, Laura Lee. See Deussen, 648.

Laney, Francis Baker. See Emmons, 743; Piper, 2005.

Lang, Walter B.

1535. Potash investigations in 1924: U. S. Geol. Survey, Bull. 785, pp. 29-43, 2 figs., 1 pl., May 20, 1926.

1536. Unusual natural gases: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 11, pp. 1176–1177, November, 1926.

Lanning, J.

1537. The gypsum deposits of Moose River [northern Ontario]: Canadian Min. Jour., vol. 47, no. 50, pp. 1172-1174, 4 figs., December 10, 1926.

Larde, Jorge.

1538. El volcán de Izalco en El Salvador, America Central, de 1922 á 1925: Bull. volcanologique, 2º ann., nos. 5-6, pp. 209-211, 1925.

Larsen, Esper Signius. See also Gage, 855; Shannon, 2295, 2305.

1539. (and Schaller, Waldemar T.). The identity of variscite and peganite and the dimorphous form, metavariscite: Am. Mineralogist, vol. 10, no. 2, pp. 23–28, February, 1925.

1540. (and Vassar, Helen E.). Chalcoalumite, a new mineral from Bisbee, Arizona: Am. Mineralogist, vol. 10, no. 4, pp. 79–83, Apr.l, 1925.

1541. The identity of ectropite and bementite: Am. Mineralogist, vol. 10, no. 11, pp. 418-421, November, 1925.

1542. (and Wherry, Edgar T.). Beidellite, a new mineral name: Washington Acad. Sci., Jour., vol. 15, no. 21, pp. 465-466, December 19, 1925.

1543. (and Berman, Harry). The identity of gilpinite and johannite: Am. Mineralogist, vol. 11, no. 1, pp. 1-5, 2 figs., January, 1926.

1544. (and Hess, F. L., and Schaller, W. T.). Uranium minerals from Lusk, Wyoming: Am. Mineralogist, vol. 11, no. 6, pp. 155-164, June, 1926.

1545. (and Foshag, William F.). Cancrinite as a high-temperature mineral from Colorado: Am. Mineralogist, vol. 11, no. 11, pp. 300-303, November, 1926.

Lausen, Carl.

1546. (and Wilson, E. D.). Gold and copper deposits near Payson, Arizona:
Arizona, Univ., Arizona Bur. Mines, Bull. no. 120, 44 pp., 3 figs.,
5 pls., December 1, 1925.

1547. Tourmaline-bearing cinnabar veins of the Mazatzal Mountains, Arizona: Econ. Geology, vol. 21, no. 8, pp. 782-791, 2 figs., December, 1926.

Lawson, Andrew Cowper. See also Grout, 981.

1548. The Cypress Plain: California, Univ., Pub. in Geol. Sci., vol. 15, no. 6, pp. 153–158, 1 fig., March 16, 1925.

Lawson, C. C. See Schairer, 2245.

Lee, Wallace.

1549. Description of the Gillespie and Mount Olive quadrangles: U. S. Geol. Survey, Geol. Atlas U. S., Gillespie-Mount Olive folio, Illinois (no. 220), 14 pp., 16 figs., 4 maps, 1926.

Lee, Willis Thomas.

1550. Erosion by solution and fill [Pecos Valley, New Mexico]; U. S. Geol. Survey, Bull. 760, pp. 107-121, 5 figs., 8 pls., April 4, 1925.

1551. Carlsbad Cavern [New Mexico]: Sci. Monthly, vol. 21, no. 2, pp. 186-190, August, 1925.

1552. New discoveries in Carlsbad Cavern [New Mexico]: Nat. Geog. Mag., vol. 48, no. 3, pp. 310-319, 20 figs., September, 1925.

1553. Stories in stone . . . xii, 226 pp., 3 figs., 49 pls., New York, D. Van Nostrand Company, 1926.

1554. An ice cave in New Mexico: Geog. Rev., vol. 16, no. 1, pp. 55-59, 3 figs., January, 1926.

Lees, James Henry.

1555. Mineral production in Iowa in 1921 and 1922: Iowa Geol. Survey, vol. 30, pp. 7-32 [1925].

1556. Mineral production in Iowa in 1923 and 1924: Iowa Geol. Survey, vol. 31, pp. 9-52 [1926?].

1557. Stone axes from Adel [Iowa]: Iowa Acad. Sci., Proc., 1925, vol. 32, pp. 331-334, 2 pls. [1926].

Legrave, M.

1558. Note sur un cas de solifluxion observé dans les Coast Ranges de Californie: Soc. géol. Belgique, Ann., t. 46, l. 2, pp. B150-152, 1 fig., 1923. Progress in malary sectors: New York Street, 1923.

Leighton, Henry.

1559. The geology of Pittsburgh and its environs; a popular account of the general geologic features of the region: Carnegie Mus., Annals, vol. 17, no. 1, pp. 91-162, 8 figs. (incl. maps), 7 pls. (incl. map), June-November, 1926.

Leighton, Morris Morgan. See also Twenhofel, 2603.

1560. The glacial history of the Elgin region: Illinois State Acad. Sci., Trans., vol. 17, pp. 65-71, 1925.

1561. Memorial to Dr. Thomas L. Watson: Science, new ser., vol. 61, pp. 255-256, March 6, 1925.

1562. Field meeting of the Association of American State Geologists: Science, new ser., vol. 62, pp. 452-453, November 20, 1925.

1563. A notable type Pleistocene section; the Farm Creek exposure near Peoria, Illinois: Jour. Geology, vol. 34, no. 2, pp. 167-174, 1 fig., February-March, 1926; Illinois State Geol, Survey, Rept. Investigations, no. 11, pp. 3-9, 1 fig., 1926; Illinois State Acad. Sci. Trans., vol. 18, pp. 167-174, 1 fig., 1925.

1564. Glacial geology and engineering in Illinois: Illinois State Acad. Sci. Trans., vol. 19, pp. 246-249, 1926.

Leith, Charles Kenneth.

1565. Silicification of erosion surfaces: Econ. Geology, vol. 20, no. 6, pp. 513-523, September-October, 1925.

Leonard, Arthur Gray.

1566. The contest between land and sea near San Diego [California]: North Dakota, Univ., Quart. Jour., vol. 15, no. 2, pp. 135-140, 2 figs., 2 pls., January, 1925.

1567. (and Babcock, Earle J., and Dove, Leonard P.). The lignite deposits of North Dakota: North Dakota Geol. Survey, Bull. no. 4, 240 pp., 21 pls. (incl. maps), 1925.

1568. Lignitic coals of North Dakota: Pan-Am. Geologist, vol. 45, no. 2, pp. 135-140, 3 pls., March, 1926.

Leonard, R. J. See Schwartz, 2274.

Leverett, Frank.

1569. Factors that determine direction of ice movement (abstract): Pan-Am. Geologist, vol. 44, no. 2, pp. 152–153, September, 1925.

1570. The Pleistocene glacial stages; were there more than four?: Am. Philos. Soc., Proc., vol. 65, no. 2, pp. 105-118, 1926.

1571. Status of Iowa drift problem (abstract): Pan-Am. Geologist, vol. 45, no. 2, pp. 171-172, March, 1926.

1572. Studies of Pleistocene phenomena of Ohio River Basin (abstract): Science, new ser., vol. 63, pp. 484–485, May 7, 1926.

Lewis, Frank E. See Gould, 954.

Lewis, Joseph Volney. See also Spurr, 2406; Twenhofel, 2599.

1573. Mining geology [review of progress in]: Eng. and Min. Jour.-Press, vol. 119, no. 3, pp. 102–104, January 17, 1925.

1574. Possible inorganic petroleum: Eng. and Min. Jour.-Press, vol. 120, no. 4, pp. 137–139, July 25, 1925.

1575. Progress in mining geology: Eng. and Min. Jour. Press, vol. 121, no. 3, pp. 103-105, January 16, 1926.

1576. Magmatic carbons and hydrocarbons (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, pp. 148-149, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 1, p. 96, February, 1926.

Ley, Henry A.

1577. The Kirk gas sand in the Graham district, Oklahoma: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 6, p. 1024, September, 1925.

1578. The granite ridge of Kansas: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 1, pp. 95–96, January, 1926.

1579. Mississippi lime west of the granite ridge in Kansas: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 1, pp. 96-97, January, 1926.

1580. The Sheridan test, Ellsworth County, Kansas: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 2, p. 109, February, 1926.

1581. Age of producing horizon, Rice County, Kansas: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 2, pp. 197–198, February, 1926.

Lilley, Ernest Raymond.

1582. The oil industry; production, transportation, resources, refining, and marketing. x, 548 pp., 181 figs., New York, D. Van Nostrand Company, 1925.

Lincoln, Francis Church.

1583. Half a century of mining in the Black Hills: Eng. and Min. Jour., vol. 122, no. 6, pp. 205-214, August 7, 1926. Lindgren, Waldemar. See also Bruce, 313.

1584. The cordierite-anthophyllite mineralization at Blue Hill, Maine, and its relation to similar occurrences: Nat. Acad. Sci., Proc., vol. 11, no. 1, pp. 1-4, January 15, 1925.

1585. Gel replacement, a new aspect of metasomatism: Nat. Acad. Sci., Proc., vol. 11, no. 1, pp. 5-11, January 15, 1925.

1586. Metasomatism: Geol. Soc. America, Bull., vol. 36, no. 1, pp. 247-261, March 30, 1925.

1587. Ore deposits of the Jerome and Bradshaw Mountains quadrangles, Arizona: U. S. Geol. Survey, Bull. 782, 192 pp., 10 figs., 23 pls. (incl. maps), 1926.

1588. Magmas, dikes, and veins (with discussion by J. T. Singewald, W. H. Emmons, J. C. Anderson, J. F. Kemp, R. J. Colony, A. M. Bateman, J. E. Spurr, C. A. Porter, and Blamey Stevens): Am. Inst. Min. and Met. Eng., Trans., vol. 74, pp. 71-126, 4 figs., 1926; Pam. no. 1575, 47 pp., June, 1926; Eng. and Min. Jour., vol. 122, no. 4, pp. 125-133, July 24, 1926; abstract, Mining and Metallurgy, vol. 7, no. 235, pp. 305-306, July, 1926. Extract, Canadian Min. Jour., vol. 47, no. 34, pp. 821-828, August 20, 1926.

1589. World lead deposits: Mining and Metallurgy, vol. 7, no. 234, pp. 244-245, June, 1926; Canadian Min. Jour., vol. 47, no. 38, pp. 908-909, September 17, 1926.

Lindly, J. M.

1590. The deep water well at Brighton: Iowa Acad. Sci., Proc., vol. 31, pp. 365-367 [1926?].

1591. Deep well at Morning Sun [Iowa]: Iowa Acad. Sci., Proc., 1925, vol. 32, pp. 343-344 [1926].

Linker, S.

1592. The relation of peat to oil shale: Am. Peat. Soc., Jour., vol. 18. no. 2, pp. 45-49, April, 1925.

Little, Homer Payson.

1593. Erosional cycles in the Front Range of Colorado and their correlation (with discussion): Geol. Soc. America, Bull., vol. 36, no. 3, pp. 495-512, 11 figs., September 30, 1925; abstract, no. 1, p. 138, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 1, p. 79, February, 1925.

Littlefield, Max Sylvan.

1594. Preliminary report on an investigation of the molding sand resources of Illinois: Illinois State Geol. Survey, Rept. Investigations no. 3, 37 pp., 1925.

1595. Natural-bonded molding sand resources of Illinois: Illinois State Geol. Survey, Bull. no. 50, 183 pp., 49 figs., 1925.

Livingston, Douglas Clermont.

1596. A geologic reconnaissance of the Mineral and Cuddy Mountain mining district, Washington and Adams counties, Idaho: Idaho, Bur. Mines and Geology, Pamphlet no. 13, 24 pp., 3 maps [1925?] (mimeographed).

Lloyd, A. M. See Hammer, 1006, 1007.

Lobeck, Armin Kohl.

1597. Panorama of physiographic types. 4 pp., 2 charts, Madison, Wisconsin, Wisconsin Geographical Press, 1926.

Locke, Augustus.

1598. Geology as a guide to ore: Econ. Geology, vol. 20, no. 7, pp. 691–692, November, 1925.

1599. Leached outcrops as guides to copper ore. 175 pp., 18 figs., 24 pls., Baltimore, The Williams and Wilkins Company, 1926.

1600. The formation of certain ore bodies by mineralization stoping: Econ. Geology, vol. 21, no. 5, pp. 431–453, 15 figs., August, 1926.

1601. Ore finding: Mining and Metallurgy, vol. 7, no. 240, pp. 520–523, December, 1926.

Lockett, J. R.

1602. Notes on the Clinton sandstone in Ohio: Nat. Petroleum News, vol. 16, no. 44, pp. 73, 75, 76, 79, 81, 83, October 29, 1924.

Lockwood, C. D.

1603. Geology of Panhandle [Texas]: Oil and Gas Jour., vol. 24, no. 43, pp. 30, 152, map, March 18, 1926.

Lodochnikow, W. N.

1604. A discussion of N. L. Bowen's paper, "The problem of the anorthosites": Jour. Geology, vol. 33, no. 2, pp. 153-172, 1925.

Logan, Clarence August.

1605. Copper mining in California: Min. Congress Jour., vol. 12, no. 9, pp. 631, 632, 639, September, 1926.

Logan, William Newton. See also Moulton, 1860.

1606. Report of the division of geology: Indiana, Dept. Conservation, 4th Ann. Rept., pp. 8-18, 1923.

1607. The peat deposits of Indiana: Indiana, Dept. Conservation, 4th Ann. Rept., pp. 21–26, 1923.

1608. Report of the division of geology: Indiana, Dept. Conservation, 5th Ann. Rept., pp. 10-17, 1924.

1609. Petroleum conservation: Indiana, Dept. Conservation, 5th Ann. Rept., pp. 17–25, 1924.

1610. Report of the division of geology: Indiana, Dept. Conservation, 6th Ann. Rept., pp. 10–19, 1925.

1611. The conservation of natural gas: Indiana, Dept. Conservation, 6th Ann. Rept., pp. 19-21, 1925.

1612. Indiana petroleum conditions in 1924: Am. Inst. Min. and Met. Eng., no. 1447, pp. 112–119, 1 fig., April, 1925.

1613. The sub-Trenton formations of Indiana: Indiana Acad. Sci., Proc., vol. 34, pp. 75–79, 1925.

1614. The geology of the deep wells of Indiana: Indiana, Dept. Conservation, Div. Geology, Pub. no. 55, 540 pp., 1926.

1615. Stratigraphy of Pennsylvanian and upper Mississippian formations of southwestern Indiana (abstract): Pan-Am. Geologist, vol. 45. no. 2, pp. 175-176, March, 1926.

Long, Eleanor Tatum.

1616. The mouth of preglacial Salmon Creek, New York: Am. Jour. Sci., 5th ser., vol. 12, pp. 510-514, 1 fig., December, 1926.

Longwell, Chester Ray.

1617. Geological significance of isostasy and gravity measurements; a review: Geog. Rev., vol. 15, pp. 123–129, January, 1925.

Longwell, Chester Ray-Continued.

1618. Complex structure in the Spring Mountains, Nevada (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 150, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, p. 149, March, 1925.

1619. The pre-Triassic unconformity in southern Nevada: Am. Jour. Sci., 5th ser., vol. 10, pp. 93-106, 5 figs., August, 1925.

1620. Structural studies in southern Nevada and western Arizona: Geol. Soc. America, Bull., vol. 37, no. 4, pp. 551-583, 7 figs., 4 pls., December 30, 1926; abstract, no. 1, p. 165, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, p. 164, March, 1926.

Lonsdale, John T. See also Gould, 949, 953.

1621. Post-Cincinnatian granites of northeastern Piedmont Virginia: Jour. Geology, vol. 34, no. 2, pp. 159-166, 3 figs. (maps), February-March, 1926.

1622. A Piedmont Virginia magmatic complex: Am. Jour. Sci., 5th ser., vol. 11, pp. 505-513, 2 figs., June, 1926.

1623. Niter and soda niter from Brewster County, Texas: Am. Mineralogist, vol. 11, no. 7, pp. 189-190, July, 1926.

1624. The occurrence of caliche in Oklahoma (abstract): Iowa Acad. Sci., Proc., 1925, vol. 32, p. 357 [1926].

Loomis, Benjamin Franklin.

1625. Pictorial history of the Lassen Volcano [California]. 135 pp., 84 figs., map, Anderson, Calif., Anderson Valley News Press [1926].

Loomis, Frederic Brewster. See also Gidley, 888.

1626. Miocene oreodonts in the American Museum; Am. Mus. Nat. Hist., Bull., vol. 51, pp. 1-37, 26 figs., July 10, 1924.

1627. Leptauchenia and Cyclopidius: Am. Jour. Sci., 5th ser., vol. 9, pp. 241-249, 4 figs., March, 1925.

1628. Dentition of artiodactyls: Geol. Soc. America, Bull., vol. 36, no. 4, pp. 583-604, 20 figs., December 30, 1925; abstract, no. 1, p. 226, March 30, 1925.

1629. The evolution of the horse. xvi, 233 pp., 41 figs., 25 pls., Boston, Marshall Jones Company, 1926.

1630. Early man in Florida: Natural History (Am. Mus. Nat. Hist., Jour.), vol. 26, no. 3, pp. 260-262, 2 figs., May-June, 1926.

Lorenzana, Luís García.

1631. Informe geológico de unos terrenos de los que se han encontrado muestras de amianto: Cuba, Dirección de montes y minas, Bol. minas, no. 8, pp. 61-63, 1 fig., August, 1925.

Louderback, George Davis.

1632. Morphologic features of the basin range displacements in the Great Basin: California, Univ., Dept. Geol. Sciences, Bull., vol. 16, no. 1, pp. 1-42, 9 figs., 6 pls., January 9, 1926.

Loughlin, Gerald Francis. See also Hill, 1111.

1633. The mineral resources of the United States in 1922: U. S. Geol. Survey, Mineral Resources, 1922, pt. 1, 1-124A, 1925.

1634. (and Coons, A. T.). Slate in 1924; U. S., Bur. Mines, Mineral Resources U. S., 1924, pt. 2, pp. 151-160, December 16, 1925.

1635. (and Coons, A. T.). Lime in 1924: U. S., Bur. Mines, Mineral Resources U. S., 1924, pt. 2, pp. 193-230, May 22, 1926.

Loughlin, Gerald Francis-Continued.

1636. Guides to ore in the Leadville district, Colorado: U. S. Geol. Survey, Bull. 779, 37 pp., 4 figs., 7 pls. (incl. map), 1926.

Lovering, Thomas S.

1637. Metasomatism and linear "force of growing crystals" (discussion): Econ. Geology, vol. 21, no. 5, pp. 507-511, August, 1926.

Lowe, Ephraim Noble.

1638. Geology and mineral resources of Mississippi : Mississippi State Geol. Survey, Bull. no. 20, 140 pp., 10 figs., 1925.

Lugn, A. L.

1639. A theory of origin of some limestone masses and septaria: Iowa, Univ., Studies, new ser., no. 104, Studies in Natural History, vol. 11, no. 8, pp. 19–22, 3 figs., March 1, 1926.

1640. Methods of collecting sediment samples from the Mississippi River:
Iowa, Univ., Studies, new ser., no. 104, Studies in Natural History,
vol. 11, no. 8, pp. 23–31, 2 pls., March 1, 1926.

1641. Some large glacial boulders in Des Moines County, Iowa: Iowa Acad. Sci., Proc., vol. 32, pp. 345–350, 7 figs. [1926].

1642. The Mississippian-Pennsylvanian and Pennsylvanian-Pleistocene unconformities in Lucas County, Iowa: Iowa Acad. Sci., Proc., 1925, vol. 32, pp. 351–356, 2 figs. [1926].

1643. Observed origin of some mud pebbles (abstract): Pan-Am. Geologist, vol. 46, no. 5, pp. 403–404, December, 1926.

Lull, Richard Swann.

1644. Early fossil hunting in the Rocky Mountains: Natural History (Am. Mus. Nat. Hist., Jour.), vol. 26, no. 5, pp. 455-462, 5 figs., September-October, 1926.

Lupton, Charles T.

1645. (and Marks, E. M.). Oil possibilities in South Dakota west of the Missouri River: Oil and Gas Jour., vol. 23, no. 5, pp. 78, 80, 82, 84, June 26, 1924.

1646. Areal and structural geologic map of Otero County, Colorado. Scale ½ inch=1 mile. 1926. Engraved and printed by the Clason Map Co., Denver.

Lusk, Ralph G. See Mather, 1715.

Macbride, Thomas H.

1647. A section in some late Tertiary and Quaternary marls near De Land, Florida (abstract); Iowa Acad. Sci., Proc., vol. 31, p. 334 [1926?].

McCallie, Samuel Washington.

1648. A preliminary report on the mineral resources of Georgia; revised edition: Georgia, Geol. Survey, Bull. no. 23, 164 pp., 1 fig., 22 pls. (incl. map), 1926.

MacCarthy, Gerald R.

1649. Some facts and theories concerning laccoliths: Jour. Geology, vol. 33, no. 1, pp. 1-18, 7 figs., January-February, 1925.

1650. Iron coloration in rocks and minerals: Elisha Mitchell Sci. Soc., Jour., vol. 41, nos. 1-2, pp. 135-137, September, 1925.

1651. Iron-stained sands and clays: Jour. Geology, vol. 34, no. 4, pp. 352–360, May–June, 1926. MacCarthy, Gerald R.—Continued.

1652. Colors produced by iron in minerals and the sediments; Am. Jour. Sci., 5th ser., vol. 12, pp. 17-36, July, 1926.

1653. The green color of certain ferrous minerals: Am. Mineralogist, vol. 11, no. 12, pp. 321-325, December, 1926.

McClellan, H. W.

1654. Laumontite from southern Oregon: Am. Mineralogist, vol. 11, no. 10, pp. 287–288, October, 1926.

MacClintock, Paul.

1655. Pre-Illinoian till in southern Illinois: Jour. Geology, vol. 34, no. 2, pp. 175-180, 4 figs., February-March, 1926; Illinois State Geol. Survey, Rept. Investigations, no. 11, pp. 10-15, 4 figs., 1926.

McClung, C. E.

1656. Martinichthys, a new genus of Cretaceous fish from Kansas, with descriptions of six new species: Am. Philos. Soc., Proc., vol. 65, no. 5, suppl., pp. 20-26, 2 pls., 1926.

McCormack, John T.

1657. Experiments on the dehydration of gypsum: Jour. Geology, vol. 34, no. 5, pp. 429-433, July-August, 1926.

McCoy, Alexander Watts.

1658. Soluble material in oil shale: Am. Assoc. Petroleum Geologists, Bull., vol. 9. no. 6. p. 1025, September, 1925.

1659. A brief outline of some oil-accumulation problems: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 11, pp. 1015-1034, 1 fig., November, 1926.

McCrea, Charles.

1660. Willet Green Miller: Canadian Min. Jour., vol. 47, no. 47, pp. 1107-1110, 2 figs., November 19, 1926.

McDonald, O. G. See Merritt, 1778.

McDonald, Worth W.

1661. The Cotton Valley, Louisiana, oil field: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 5, pp. 875-885, 1 fig., August, 1925.

Macelwane, James B. See also Bowie, 249; Rogers, 2135.

1662. Recent seismic activity in central California (abstract with discussion by Warren D. Smith): Geol. Soc. America, Bull., vol. 36, no. 1, pp. 203-204, March 30, 1925.

1663. New evidence for a sharply bounded and very rigid core in the earth (abstract): Physical Rev., 2d ser., vol. 25, no. 5, p. 721, May, 1925.

1664. (and Appleford, William L.). The registration of earthquakes at the Berkeley Station and at the Lick Observatory Station from October 1, 1922, to March 31, 1923: California, Univ., Seismographic Stations, Bull., vol. 2, no. 5, pp. 67-87, July 30, 1925.

1665. The earthquake of January 22, 1923 [western North America]: California, Univ., Seismographic Stations, Bull., vol. 2, no. 5, pp. 88-90, July 30, 1925.

86012—28——8

Macelwane, James B.—Continued.

1666. (and Appleford, William L.). The registration of earthquakes at the Berkeley Station and at the Lick Observatory Station from April 1, 1923, to September 30, 1923: California, Univ., Seismographic Stations, Bull., vol. 2, no. 6, pp. 91–105, December 31, 1925.

1667. (and Byerly, Perry). The registration of earthquakes at the Berkeley Station and at the Lick Observatory Station from October 1, 1923, to March 31, 1924: California, Univ., Seismographic Stations, Bull., vol. 2, no. 7, pp. 107–119, December 31, 1925.

1668. Are important earthquakes ever caused by impact?: Seismological Soc.
America, Bull., vol. 16, no. 1, pp. 15–18, March, 1926; abstract,
Pan-Am. Geologist, vol. 45, no. 3, p. 253, April, 1926.

1669. Evidence furnished by the earthquake of June 26, 1924, for a sharply bounded and very rigid core in the earth (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, pp. 209-210, March 30, 1926.

1670. The Jesuit seismographic stations in the United States and Canada a retrospect: Seismological Soc. America, Bull., vol. 16, no. 3, pp. 187–193, September, 1926.

McEvoy, James.

1671. Smoky River coal field; examination and comparison with the Kananaskis area: Canada, Dominion Fuel Board [Pub.] no. 7, Geol. Survey [Pub.] no. 2055, 15 pp., 3 figs., 5 pls. [1925].

McGonigle, Fritz. See Thomson, 2545.

Macgregor, Alexander Miers.

1672. The origin of sedimentary iron ores: Econ. Geology, vol. 20, no. 2, pp. 195–197, March-April, 1925.

MacKay, Bertram Reid.

1673. Hat Creek coal deposit, Kamloops district, British Columbia: Canada, Geol. Survey, Summ. Rept., 1925, pt. A, pp. 164–181, 3 figs., 1926.

McKee, Ralph Harper.

1674. (and others). Shale oil. 326 pp., 35 figs., American Chemical Society Monograph series, New York, The Chemical Catalog Company, 1925.

McKeehan, L. W. See Kovarik, 1501.

Mackenzie, George C.

1675. (and Corless, C. V.). Willet G. Miller: Canadian Inst. Min. and Met., Bull., no. 155, pp. 178–181, portr., March, 1925.

McLearn, Frank Harris.

1676. New species from the Coloradoan of lower Smoky and lower Peace rivers, Alberta: Canada, Geol. Survey, Bull. no. 42, pp. 117–126, 4 pls., May 8, 1926.

1677. New Jurassic species from the Hazleton group of British Columbia: Canada, Geol. Survey, Bull. no. 44, pp. 89–99, 7 pls., 1926.

McLeish, John.

1678. [Report of the] Mines Branch: Canada, Dept. Mines, Rept., 1924, pp. 49-60, 1925.

MacLeod, C. W.

1679. The Goudreau gold area [Ontario]: Canadian Inst. Min. and Met., Bull., no. 167, pp. 393-401, 2 figs., March, 1926; Trans., vol. 29, pp. 183-195, 2 figs. [1927]. MacMacken, John G.

1680. Eolative soils of Washington wheat lands: Pan-Am, Geologist, vol. 43, no. 3, pp. 177-184, April, 1925.

MacNaughton, Lewis W.

1681. Notes on the undescribed meteorites in the collection of the American Museum of Natural History: Am. Mus. Novitates, no. 207, 2 pp., February 16, 1926.

MacVichie, Duncan.

1682. Iron fields of the Iron Springs and Pinto mining districts, Iron County, Utah: Am. Inst. Min. and Met. Eng., Trans. [preprint] no. 1468, 11 pp., 9 figs., July, 1925; Trans., vol. 74, pp. 163-173, 9 figs., 1926; abstract, Mining and Metallurgy, vol. 6, no. 224, p. 441, August, 1925.

Malcolm, Wyatt.

1683. William McInnes; an appreciation: Canadian Min. Jour., vol. 46, no. 13, pp. 317-318, portr., March 27, 1925.

1684. Limestone on Abitibi and Mattagami rivers, Ontario: Canada, Geol. Survey, Summ. Rept., 1924, pt. C, pp. 96-98, 1 fig., 1926.

Malott, Clyde Arnett.

1685. The upper Chester of Indiana: Indiana Acad. Sci., Proc., vol. 34, pp. 103-132, 11 figs., 1925.

1686. The glacial boundary in Indiana: Indiana Acad. Sci., Proc., vol. 35, pp. 93-107, 6 figs., 1926.

Mannhardt, L. Alfred. See Wood, 2866.

Mansfield, George Rogers.

1687. Physiography of southeastern Idaho (abstract): Washington Acad. Sci., Jour., vol. 15, no. 8, pp. 182-183, April 19, 1925.

1688. Geography of southeastern Idaho: Assoc. Am. Geographers, Annals, vol. 15, no. 2, pp. 51-64, 3 figs., June, 1925.

1689. (and Boardman, Leona). Potash in 1924: U. S. Bur. Mines, Mineral Resources U. S., 1924, pt. 2, pp. 27-61, October 24, 1925.

1690. Phosphate rock in 1924: U. S. Bur. Mines, Mineral Resources U. S., 1924, pt. 2, pp. 77-112, November 7, 1925.

1691. Section E (Geology and geography) [Kansas City session, American Association for the Advancement of Science]: Science, new ser., vol. 63, pp. 126-127, January 29, 1926.

1692. The story of the northern Rockies: Sci. Monthly, vol. 23, no. 5, pp. 447-450, November, 1926.

1693. Phosphate reserves ample for 2,000 years: Eng. and Min. Jour., vol. 122, no. 21, pp. 810-814, 3 figs., November 20, 1926.

Mansfield, Wendell C.

1694. Miocene gastropods and scaphopods from Trinidad, British West Indies: U. S. Nat. Mus., Proc., vol. 66, art. 22, 65 pp., 10 pls., September 18, 1925.

1695. Note on the occurrence of the Choptank formation in the Nomini Cliffs, Virginia: Washington Acad. Sci., Jour., vol. 16, no. 7, pp. 175-177, April 4, 1926.

Manson, Marsden.

1696. The unsatisfactory status of the glacial controversy: Science, new ser., vol. 62, pp. 212-214, September 4, 1925.

Margerie, Emmanuel de.

1697. Commentaire de l'atlas of Colorado (1877): France, Comité des travaux historiques et scientifiques, Bulletin de la Section de géographie, t. 39, ann. 1924, pp. 1–80, 8 figs., 4 pls. (portr.), 7 maps, 1924 [1925].

Marks, E. M. See Lupton, 1645.

Marks, J. E.

1698. The iron ranges of northwestern Ontario: Lake Superior Min. Inst.,
Proc. 24th Ann. Meeting, vol. 24, pp. 200-208, 1 fig. (map), 1925.

Marland Oil Co. of Mexico.

1699. Informe sobre la exploración geológica de la Baja California: Bol. petróleo, vol. 17, no. 6, pp. 417-453, June, vol. 18, no. 1, pp. 14-53, 60 pls., map, July, 1924.

Marshall, J. R.

1700. Whitesail-Tahtsa lakes area, British Columbia: Canada, Geol. Survey, Summ. Rept., 1924, pt. A, pp. 47-58, map, 1925.

1701. Eutsuk Lake area, Coast district, British Columbia: Canada, Geol. Survey, Summ. Rept., 1925, pt. A, pp. 144-154, map, 1926.

Marshall, William B.

1702. New fossil fresh-water mollusks from Florida: U. S. Nat. Mus., Proc., vol. 68, art. 11, 4 pp., 1 pl., 1926.

Martens, James H. C.

1703. Glacial boulders in eastern, central, and northern New York: New York State. Mus. Bull., no. 260, pp. 81–116, 4 figs., 1925.

1704. Barite and associated minerals in concretions in the Genesee shale [central New York]: Am. Mineralogist, vol. 10, no. 4, pp. 102-104, April, 1925.

1705. Sulphate minerals from weathering of shale near Ithaca, New York: Am. Mineralogist, vol. 10, no. 7, pp. 175-176, July, 1925.

Martin, George Curtis.

1706. Petroleum in Alaska: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 2, pp. 1173–1180, 1 fig. [1924].

1707. Correlation and paleogeography of the Cretaceous of Alaska: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 2, pp. 1345–1359 [1924].

1708. The outlook for petroleum near Chignik [Alaska]: U. S. Geol. Survey, Bull. 773, pp. 209-213, map. 1925.

1709. The Mesozoic stratigraphy of Alaska: U. S. Geol. Survey, Bull. 776, 493 pp., 13 figs., 1926.

Martin, H. T.

1710. A new bison from the Pleistocene of Kansas, with notice of new locality for *Bison occidentalis:* Kansas Univ. Sci. Bull., vol. 15, no. 6, pp. 273–278, December, 1924.

Martin, Laura Hatch.

1711. The geology of the Stonington region, Connecticut: Connecticut State Geol. and Nat. Hist. Survey, Bull. no. 33, 70 pp., 9 figs., 8 pls., map, 1925.

Martínez Quintero, Rodolfo.

1712. Estudio microscópico de las arenas volcánicas del Popocatepetl: Mexico, Inst. geol., Anales, t. 2, nos. 1-3, pp. 61-63, 1925.

Mason, S. L. See Barton, 130.

Mather, Kirtley Fletcher. See also Daly, 585.

1713. Mineral resources of the Kamishak Bay region [Alaska]: U. S. Geol. Survey, Bull. 773, pp. 159-181, map, 1925.

1714. Physiographic surfaces in the Front Range of northern Colorado and their equivalents on the Great Plains (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, pp. 134-135, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 1, pp. 76-77, February, 1925.

1715. (and Lusk, Ralph G.). A laboratory manual of dynamic and structural geology. 103 pp., Cambridge, Harvard University Press, 1926.

1716. Glacial geology of Cape Breton Island, Nova Scotia (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, pp. 178-180, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, p. 169, March, 1926.

Matley, Charles Alfred.

1717. Report of a reconnaissance geological survey of the Cayman Islands: Jamaica, Ann. Gen. Rept. for 1923, pp. 41-45, 1925.

1718. Report by the government geologist on the progress of the geological surveys in Jamaica for economic purposes (except as regards water resources) for the period June, 1923, to April, 1924: Jamaica, Ann. Gen. Rept. for 1923, pp. 100-102, 1925.

1719. Report on a mineral spring at Windsor, St. Ann, and on the probability of the occurrence of petroleum in its neighborhood; Jamaica, Ann.

Gen. Rept. for 1923, pp. 306-308, 1925.

1720. Report on the strata in the valley of St. Ann's Great River, Parish of St. Ann, Jamaica: Supplement to the Jamaica Gazette, vol. 48, no. 3, pp. 13-15, January 15, 1925.

1721. Recent geological work in Jamaica (abstract): British Assoc. Adv. Sci., Rept. 92d Meeting, pp. 391-392, 1925.

1722. A reconnaissance geological survey of the Cayman Islands, British West Indies (abstract): British Assoc. Adv. Sci., Rept. 92d Meeting, pp. 392-393, 1925.

1723. The geology of the Cayman Islands, British West Indies, and their relations to the Bartlett trough: Geol. Soc. London, Quart. Jour., vol. 82, pt. 3, pp. 352-387, 13 figs., October 19, 1926; abstract, with discussion, Geol. Soc. London, Abstracts of Proc., no. 1150, pp. 74-76, April 29, 1926.

Matthes, François Émile.

1724. Evolution Basin [Sierra Nevada, California] (abstract): Assoc. Am. Geographers, Annals, vol. 15, no. 1, p. 41, March, 1925.

1725. Evidences of recurrent glaciation in the Sierra Nevada of California (abstract): Science, new ser., vol. 61, pp. 550-551, May 22, 1925.

1726. Devil's Post-pile in the Sierra Nevada (abstract): Pan-Am. Geologist, vol. 43, no. 5, p. 372, June, 1925.

1727. Kings River Canyon and Yosemite Valley: Sierra Club Bull., vol. 12, no. 3, pp. 224-236, 5 pls., 1926.

Matthew, William Diller.

1728. Blanco and associated formations of northern Texas (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, pp. 221–222, March 30, 1925.

Matthew, William Diller-Continued.

1729. Fossil mammal faunas of Florida (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 225, March 30, 1925.

1730. A new link in the ancestry of the horse (abstract): British Assoc. Adv. Sci., Rept. 92d Meeting, pp. 380–381, 1925.

1731. The value of paleontology: Natural History (Jour. Am. Mus. Nat. Hist.), vol. 25, no. 2, pp. 166-168, March-April, 1925.

1732. (and Barbour, E. H.). An American fossil giraffe, Giraffa nebrascensis, sp. nov.: Nebraska State Mus., Bull. 4, vol. 1, pp. 33–40, 7 figs., April, 1925.

1733. The evolution of the horse; a record and its interpretation: Quart. Rev. Biology, vol. 1, no. 2, pp. 139–185, 27 figs., 1 pl., April, 1926.

1734. On a new primitive deer and two traguloid genera from the lower Miocene of Nebraska: Am. Mus. Novitates, no. 215, 8 pp. 3 figs., May 10, 1926.

1735. Early days of fossil hunting in the High Plains: Natural History (Am. Mus. Nat. Hist., Jour.), vol. 26, no. 5, pp. 449-454, 5 figs., September-October, 1926.

Matthews, Asa A. L.

1736. Marine lower Triassic beds of Utah (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 200, March 30, 1925.

Maury, Carlotta Joaquina.

1737. A new formational name [Soldado formation, Trinidad region]: Science, new ser., vol. 61, p. 43, January 9, 1925.

1738. A further contribution to the paleontology of Trinidad (Miocene horizons): Bull. Am. Paleontology, vol. 10, no. 42, 250 pp., 43 pls., March 27, 1925.

Mawdsley, J. B. See James, 1247.

Maynard, J. E.

1739. The clays of the Lake Agassiz Basin: Roy. Soc. Canada, Proc. and Trans., 3d ser., vol. 19, sec. 4, pp. 103-114, 1925.

Mead, Warren Judson.

1740. The geologic rôle of dilatancy: Jour. Geology, vol. 33, no. 7, pp. 685-698, 9 figs., October-November, 1925.

Mehl, Maurice Goldsmith.

1741. Wind-faceted stones from Wyoming (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, pp. 137–138, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 1, pp. 78–79, February, 1925.

1742. Brain of the phytosaurs (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 225, March 30, 1925.

1743. Development of a secondary palate in the Phytosauria (abstract):
Geol. Soc. America, Bull., vol. 36, no. 1, p. 227, March, 30, 1925.

1744. Use of vertebrate fossils in correlation of Triassic beds of the western interior region (abstract): Pan-Am. Geologist, vol. 45, no. 2, p. 174, March, 1926.

1745. Amphibian remains from Permian beds of Oklahoma (abstract): Pan-Am. Geologist, vol. 45, no. 3, pp. 252–253, April, 1926.

1746. Trematops thomasi, a new amphibian species from the Permian of Oklahoma: Jour. Geology, vol. 34, no. 5, pp. 466–474, 5 figs., July-August, 1926.

1747. Our world in the making: Science, new ser, vol. 64, pp. 577-578, December 10, 1926. [See Fairchild, no. 774.]

Meinzer, Oscar Edward. See also Renick, 2099; Twenhofel, 2603.

1748. Investigations of ground water in the western part of the United States: Pan-Pacific Sci. Cong., Australia, 1923, vol. 2, pp. 1284–1290 [1924].

1749. (and Hard, Herbert A.). The artesian-water supply of the Dakota sandstone in North Dakota with special reference to the Edgeley quadrangle: U. S. Geol. Survey, Water-Supply Paper 520, pp. 73-95, 2 figs., 2 pls., January 24, 1925.

1750. Artesian water supply of Dakota sandstone (abstract): Pan-Am. Geologist, vol. 43, no. 5, pp. 377–378, June, 1925.

1751. (and Renick, B. Coleman, and Bryan, Kirk). Geology of No. 3 reservoir site of the Carlsbad irrigation project, New Mexico, with reference to water-tightness: U. S. Geol. Survey, Water-Supply Paper 580, pp. 1–39, 2 figs., 2 pls. (incl. map), September 3, 1926.

Meisel, Max.

1752. A bibliography of American natural history; the pioneer century, 1769–1865, vol. 2, 741 pp., Brooklyn, New York, The Premier Publishing Co., 1926.

Melcher, Arles F.

1753. Apparatus for determining the absorption and the permeability of oil and gas sands for certain liquids and gases under pressure: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 3, pp. 442–450, 5 figs., May–June, 1925.

Melhase, John.

1754. Andalusite in California [Inyo Range]: Eng. and Min. Jour.-Press, vol. 120, no. 3, pp. 91-94, 7 figs., July 18, 1925.

1755. Asbestos deposits of Arizona: Eng. and Min, Jour.-Press, vol. 120, no. 21, pp. 805–810, 5 figs., November 21, 1925.

1756. Mining bentonite in California: Eng. and Min. Jour.-Press, vol. 121, no. 21, pp. 837–842, 4 figs., May 22, 1926.

Melton, Frank A.

1757. The ancestral Rocky Mountains of Colorado and New Mexico: Jour. Geology, vol. 33, no. 1, pp. 84-89, 1 fig., January-February, 1925.

1758. Interpretation of the isostatic anomaly: Am. Jour. Sci., 5th ser., vol. 10, pp. 166-174, 1 fig., August, 1925.

1759. Correlation of Permo-Carboniferous red beds in southwestern Colorado and northern New Mexico: Jour. Geology, vol. 33, no. 8, pp. 807– 815, 1 fig., November–December, 1925.

Mendenhall, Walter Curran.

1760. Trends in American geology [notice by T. C.]: Nature, vol. 117, pp. 489-491, April 3, 1926; abstract, Pan-Am. Geologist, vol. 45, no. 2, p. 171, March, 1926.

1761. Cooperative geologic surveys in Colorado: Mining and Metallurgy, vol. 7, no. 239, pp. 476–478, November, 1926.

Merriam, John Campbell.

1762. (and Stock, Chester). Relationships and structure of the short-faced bear, Arctotherium, from the Pleistocene of California: Carnegie Inst. Washington, Pub. no. 347 (Papers concerning the paleontology of the Pleistocene of California and the Tertiary of Oregon), pp. 1–35, 5 figs., 10 pls., October 8, 1925.

Merriam, John Campbell-Continued.

1763. (and Stock, Chester). A llama from the Pleistocene of McKittrick, California: Carnegie Inst. Washington, Pub. no. 347 (Papers concerning the paleontology of the Pleistocene of California and the Tertiary of Oregon), pp. 37–42, 4 figs., October 8, 1925.

1764. (and Stock, Chester, and Moody, C. L.). The Pliocene Rattlesnake formation and fauna of eastern Oregon, with notes on the geology of the Rattlesnake and Mascall deposits: Carnegie Inst. Washington, Pub. no. 347 (Papers concerning the paleontology of the Pleistocene of California and the Tertiary of Oregon), pp. 43-92, 45 figs., October 8, 1925.

1765. (and others). Continuation of paleontological researches: Carnegie
Inst. Washington, Year Book no. 24, pp. 258-360, December, 1925.

1766. Problem of the Pliocene in the Pacific coast and Great Basin regions (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 156, March 30, 1926; Pan-Am. Geologist, Vol. 45, no. 2, pp. 159–160, March, 1926.

1767. (and Stock, Chester). A Pliocene bear from Oregon (abstract): Science, new ser., vol. 64, p. 508, November 19, 1926.

Merrill, George Perkins. See also Hovey, 1179.

1768. An unrecorded meteorite from Mississippi [Palahatchie, Rankin County]: Am. Jour. Sci., 5th ser., vol. 9, p. 436, May, 1925.

1769. A new meteoric stone from Baldwyn, Mississippi: U. S. Nat. Mus., Proc., vol. 67, art. 6, 2 pp., 1 pl., May 22, 1925.

1770. Notes on the meteoric stone of Colby, Wisconsin; U. S. Nat. Mus., Proc., vol. 67, art. 2, 3 pp., 1 pl., May 23, 1925.

1771. Meteors: Sci. Monthly, vol. 21, no. 5, pp. 456-461, November, 1925.

1772. Report on the department of geology: U. S. Nat. Mus., Report on the Progress and Condition of the United States National Museum for the year ended June 30, 1925, pp. 73–90, 1926.

1773. Biographical memoir George Ferdinand Becker, 1847–1919; bibliography compiled by Isabel P. Evans: Nat. Acad. Sci., Mem., vol. 21, 2d mem., 19 pp., portr., 1926.

1774. The present condition of knowledge on the composition of meteorites:
Am. Philos, Soc., Proc., vol. 65, no. 2, pp. 119–130, 1926.

1775. New meteorites [Oakley, Idaho; Forksville, Virginia]: Am. Jour, Sci., 5th ser., vol. 12, p. 532, December, 1926.

Merritt, C. A. See also Johannsen, 1278.

1776. Angular inclusions in ore deposits: Econ. Geology, vol. 20, no. 6, pp. 602-604, September-October, 1925.

1777. Bigstone and Fox rivers area, northern Manitoba: Canada, Geol. Survey, Summ. Rept., 1925, pt. B, pp. 27–30, map, 1926.

Merritt, John W.

1778. (and McDonald, O. G.). Oil and gas in Oklahoma; Oil and gas in Creek County, Oklahoma: Oklahoma Geol. Survey, Bull. no. 40–C, 47 pp., 8 figs., 7 pls. (incl. map), August, 1926.

Mertie, John Beaver, jr. See also Smith, 2370.

1779. Geology and gold placers of the Chandalar district [Alaska]: U. S. Geol. Survey, Bull. 773, pp. 215–263, 4 figs., 1 pl., 1925.

1780. The Paleozoic geology of interior Alaska (abstract): Washington Acad. Sci., Jour., vol. 16, no. 3, pp. 78–79, February 4, 1926.

Merwin, Herbert E. See Goldman, 927.

Mesler, R. D. See Ulrich, 2622.

Meyer, Helena M.

1781. Sulphur and pyrites in 1924: U. S. Geol. Survey, Mineral Resources, 1924, pt. 2, pp. 1-5, April, 1925.

Middleton, Jefferson.

1782. Fuller's earth in 1924: U. S. Geol. Survey, Mineral Resources U. S., 1924, pt. 2, pp. 7-9, August 10, 1925.

Miller, Arthur McQuiston. See also Kentucky Geological Survey, 1363, 1402. 1783. Geology of Woodford County: Kentucky Geol. Survey, ser. 6, vol. 21, pp. 119-144, 5 figs., 1925.

Miller, Benjamin LeRoy.

1784. Limestones of Pennsylvania: Pennsylvania Geol. Survey, 4th ser., Bull. M7, 368 pp., 7 figs., 15 pls. (incl. map), 1925.

1785. Mineral resources of the Allentown quadrangle, Pennsylvania: Pennsylvania Geol. Survey, 4th ser., Topog. and Geol. Atlas, no. 206, Allentown quadrangle, 195 pp., 2 figs., 11 pls., 4 maps, 1925.

1786. The physiography, geology, and mineral resources of Kent County: Maryland Geol. Survey, Kent County, pp. 25-109, 3 maps, 1926.

1787. The physiography, geology, and mineral resources of Queen Annes County: Maryland Geol. Survey, Queen Annes County, pp. 25-91, 2 maps, 1926.

1788. The physiography, geology, and mineral resources of Talbot County: Maryland Geol. Survey, Talbot County, pp. 23-96, 5 pls., map, 1926.

1789. Taconic folding in Pennsylvania (with discussion by Henry B. Kümmel, I. C. White, George H. Ashley, James F. Kemp, H. N. Eaton, Bradford Willard, Charles H. Behre, jr., and U. S. Grant): Geol. Soc. America, Bull., vol. 37, no. 3, pp. 497-511, September 30, 1926; abstract, vol. 36, no. 1, p. 157, March 30, 1925: Pan-Am. Geologist, vol. 43, no. 2, p. 152, March, 1925.

1790. An unusual case of limestone decomposition (abstract): Pennsylvania Acad. Sci., Proc., vol. 1, pp. 77-78, 1926.

1791. The origin and utilization of the Cambro-Ordovician limestones of Pennsylvania: Pennsylvania Acad. Sci., Proc., vol. 1, pp. 89-99, 1 pl. (map), 1926.

Miller, Loye.

1792. The birds of Rancho La Brea [California]: Carnegie Inst. Washington, Pub. no. 349 (Studies on the fossil flora and fauna of the western United States), pp. 63-106, 20 figs., 6 pls., August, 1925.

1793. Avian remains from the Miocene of Lompoc, California: Carnegie Inst. Washington, Pub. no. 349 (Studies on the fossil flora and fauna of the western United States), pp. 107-117, 1 fig., 9 pls., August, 1925.

Miller, Willet Green.

1794. The pre-Cambrian rocks of Canada (abstract); British Assoc. Adv. Sci., Rept. 92d Meeting, pp. 386–387, 1925.

Miller, William John.

1795. An introduction to geology (physical and historical): Part I, An introduction to physical geology, 435 pp., 351 figs.; Part II, An introduction to historical geology, 399 pp., 238 figs., New York, D. Van Nostrand Company, 1925.

Miller, William John-Continued.

1796. Remarkable Adirondack glacial lake: Geol. Soc. America, Bull., vol. 36, no. 3, pp. 513-520, 1 fig., September 30, 1925; abstract, no. 1, p. 162, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, p. 155, March, 1925.

1797. Geology of the Lyon Mountain quadrangle: New York State Mus. Bull., no. 271, 101 pp., 9 figs., 13 pls., map, 1926.

1798. Origin of pyrite deposits of St. Lawrence County, New York: Econ. Geology, vol. 21, no. 1, pp. 65-67, January-February, 1926.

1799. Glaciation in the San Gabriel Mountains, California: Jour. Geology, vol. 34, no. 1, pp. 74–82, 5 figs., January–February, 1926; abstract, Geol. Soc. America, Bull., vol. 37, no. 1, p. 180, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, p. 169, March, 1926.

1800. Crystalline rocks of the middle-southern San Gabriel Mountains, California (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 149, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 1, p. 96, February, 1926.

1801. Present status of the pre-Cambrian geology of northern New York (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, pp. 219–220, March 30, 1926.

1802. Red Rock Canyon, California: Jour. Geography, vol. 25, no. 9, pp. 330-336, 7 figs., December, 1926.

Millis, John.

1803. Surface features of the moon, the earth, and Mars: Popular Astronomy, vol. 31, no. 1, pp. 1-11, 5 figs., 3 pls., January, 1923.

1804. The constructional history of the solar system and of our earth—a speculation. 12 pp., December, 1925. [Priv. pub.]

1805. Dualistic hypothesis of earth genesis: Pan-Am. Geologist, vol. 45, no. 4, pp. 257-271, May, 1926.

Mills, Enos A.

1806. Romance of geology. xii, 245 pp., illus., New York, Doubleday, Page & Company, 1926.

Miner, Roy Waldo.

1807. The pectoral limb of *Eryops* and other primitive tetrapods: Am. Mus. Nat. Hist., Bull., vol. 51, pp. 145–312, 104 figs., January 16, 1925.

1808. A fossil myriapod of the genus Parajulus from Florissant, Colorado: Am. Mus. Novitates, no. 219, 5 pp., 5 figs., June 18, 1926.

Minor, H. E.

1809. Chemical relation of salt dome waters: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 1, pp. 38-41, 1 fig., 2 pls., January-February, 1925; Geology of salt dome oil fields, pp. 777-780, 1 fig., 2 pls., 1926.

1810. Goose Creek oil field, Harris County, Texas: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 2, pp. 286–297, 4 figs., March-April, 1925; Geology of salt dome oil fields, pp. 546–557, 4 figs., 1926.

1811. The Edgerly oil field, Louisiana: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 3, pp. 497-504, 4 figs. May-June, 1925; Geology of salt dome oil fields, pp. 470-477, 4 figs., 1926.

Miser, Hugh Dinsmore. See also Moulton, 1860; U. S. Geol. Survey, 2631.

1812. (and Ross, Clarence S.). Diamond-bearing peridotite in Pike County,
Arkansas: Smithsonian Inst., Ann. Rept., 1923, pp. 261-272, 3 pls.,
1925.

Miser, Hugh Dinsmore-Continued.

1813. (and Ross, Clarence S.). Volcanic rocks in the Upper Cretaceous of southwestern Arkansas and southeastern Oklahoma: Am. Jour. Sci., 5th ser., vol. 9, no. 2, pp. 113-126, February, 1925.

1814, Erosion in San Juan Canyon, Utah: Geol. Soc. America, Bull., vol. 36, no. 2, pp. 365-377, 2 figs., 2 pls., June 30, 1925; abstract. no, 1 pp. 138-139, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 1, p. 79, February, 1925.

1815. Notes on Paleozoic rocks encountered in a well near Florence, Alabama: U. S. Geol. Survey, Bull. 781, pp. 11-12, July, 1925.

1816. (and Ross, Clarence S.). Pre-Cambrian rhyolite discovered in well in northwestern Arkansas: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 7, p. 1115, October, 1925.

1817. Tennessee Geological Survey [activities]: Pan-Am. Geologist, vol. 44, no. 4, pp. 320-321, November, 1925.

1818. Geologic map of Oklahoma: U. S. Geol. Survey, Geologic Atlas of the United States, State of Oklahoma, 1926. Scale, 1:500,000.

1819. Frosion in the San Juan Canyon, Utah (abstract): Washington Acad. Sci., Jour., vol. 16, no. 3, pp. 68-69, February 4, 1926.

Mishler, R. T.

1820. (and Budrow, L. R.) Methods of mining and ore estimation at Lucky Tiger mine [El Tigre, Sonora, Mexico]: Am. Inst. Min. and Met. Eng., Trans. [preprint] no. 1413, 16 pp., 2 figs., February, 1925.

Mitchell, George D. See Byerly, 373, 374.

Mitchell, Graham John.

1821. Ore injection at the Cananea-Duluth mine [Cananea, Sonora, Mexico]: Eng. and Mir. Jour.-Press, vol. 119, no. 2, pp. 45-48, 11 figs., January 10, 1925.

Mitchell, Guy E.

1822. The standing stone forests of Wyoming: Sci. Am., vol. 134, pp. 98-99, 7 figs., February, 1926.

Moffit, Fred Howard.

1823. The occurrence of copper on Prince William Sound, Alaska: U. S. Geol. Survey, Bull. 773, pp. 141-158, 1925.

Moodie, Roy Lee.

1824. A Cretaceous fish spine: Am. Naturalist, vol. 60, pp. 290-293, 1 pl., May-June, 1926.

Moody, C. L. See Merriam, 1764.

Mook, Charles Craig.

1825. A revision of the Mesozoic Crocodilia of North America: Am. Mus. Nat. Hist., Bull., vol. 51, pp. 319-432, 63 figs., 2 pls., April 30, 1925.

1826. Note on the occurrence of thrust faulting in western Newfoundland: Geol. Mag., vol. 63, pp. 348-350, 2 figs., August, 1926.

Moon, E. A.

1827. (and Bray, H. G.). Differential tilting of the continental shelf off the Atlantic coast of North America: Science, new ser., vol. 61, pp. 237-238, February 27, 1925.

Moore, Dudley W.

1828. Unusual geological trend in new Kansas oil pool [Woodson County, Kansas]: Oil Trade, vol. 16, no. 5, pp. 35–36, 1 fig., May, 1925.

Moore, Elwood S.

- 1829. [Proceedings of the American Association for the Advancement of Science], Section E (Geology and geography): Science, new ser., vol. 61, p. 148, February 6, 1925.
- 1830. Gold in quartzite in the Goudreau district, Ontario: Canadian Min. Jour., vol. 46, no. 6, p. 142, February 6, 1925.
- 1831. Some geological conditions controlling the formation of iron deposits in Canada: Canadian Inst. Min. and Met., Bull., no. 155, pp. 209-219, March, 1925; Trans., vol. 28, pp. 132-140 [1926].
- 1832. Sources of carbon in the pre-Cambrian formations: Roy. Soc. Canada,
 Proc. and Trans., 3d ser., vol. 19, sec. 4, pp. 21-26, 3 pls., 1925.
- 1833. Why coal has cleat and the way in which it runs: Coal Age, vol. 27, no. 16, pp. 576-578, 3 figs., April 16, 1925.
- 1834. The geological age of the Homestake ore bodies: Econ. Geology, vol. 20, no. 6, pp. 604-605, September-October, 1925.
- 1835. Mississagi Reserve and Goulais River iron ranges, District of Algoma: Ontario Dept. Mines, 34th Ann. Rept., vol. 34, pt. 4, pp. 1–33, illus., map, 1926.
- 1836. A lead and zinc deposit in Keewatin iron formation [Sudbury mining division, Ontario]: Canadian Inst. Min. and Met., Bull., no. 167, pp. 371-378, 3 figs., March, 1926.
- 1837. Origin of a Keweenawan boulder conglomerate (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 157, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, p. 160, March, 1926.
- 1838. The Keweenawan series at the eastern end of Lake Superior (abstract): British Assoc. Adv. Sci., Rept. 94th meeting, p. 346, 1926; idem, Jour. Sci. Trans., Oxford, p. 14, 1926; Pan-Am. Geologist, vol. 46, no. 4, p. 320, November, 1926.

Moore, Raymond Cecil.

- 1839. Geologic report on the inner gorge of the Grand Canyon of Colorado River: U. S. Geol. Survey, Water-Supply Paper 556, pp. 125-171, 1 fig., 5 pls., 1925.
- 1840. Fossils from wells in central Kansas; Kansas State Geol. Survey, Bull. 10, pp. 94–104, 1925.
- 1841. The Wichita meeting of the American Association of Petroleum Geologists, March 26, 27, 28, 1925: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 3, pp. 678-704, May-June, 1925.
- 1842. Memorial, Glenn Beckley Morgan: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 8, pp. 1220-1221, portr., November, 1925.
- 1843. Origin of enclosed meanders on streams of the Colorado Plateau: Jour. Geology, vol. 34, no. 1, pp. 29-57, 11 figs., January-February, 1926.
- 1844. Significance of inclosed meanders in the physiographic history of the Colorado Plateau country: Jour. Geology, vol. 34, no. 2, pp. 97–130. 11 figs., February-March, 1926.
- 1845. Early Pennsylvanian deposits west of the Nemaha granite ridge, Kansas: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 3, pp. 205-216, 2 figs., 1 pl., March, 1926.
- 1846. The subsidence near Sharon Springs, Kansas; Science, new ser., vol. 64, pp. 130–131, August 6, 1926.

Moore, Raymond Cecil-Continued.

1847. Note on subsidence near Sharon Springs, Wallace County, Kansas: Kansas, State Geol. Survey, Bull. 11, pp. 95-96 [1926].

Morgan, P. G.

1848. The so-called "pseudomorphous" quartz of Tertiary gold-silver veins: Econ. Geology, vol. 20, no. 3, pp. 203-207, 1 fig., May, 1925.

Morse, Roy R.

1849. Meeting of the Pacific section [of the American Association of Petroleum Geologists, San Francisco, 1925]: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 1, pp. 100-102, January, 1926.

Morse, William Clifford.

1850. Field trips in geology: Science, new ser., vol. 63, p. 617, June 18, 1926.

Mortimore, Morris E. See Trowbridge, 2588.

Morton, Dudley J.

1851. Notes on the footprint of *Thinopus antiquus*: Am. Jour. Sci., 5th ser., vol. 12, pp. 409-414, 6 figs., November, 1926.

Moscheles, J.

1852. Der Lake Bonneville und das eiszeitliche Klima: Zeitschr. Gletscherkunde, Bd. 12, H. 3–4, pp. 166–167, May, 1922.

Mossom, Stuart.

1853. A preliminary report on the limestones and marls of Florida: Florida State Geol. Survey, 16th Ann. Rept., pp. 27-203, 7 figs., 52 pls. (incl. map), 1925.

1854. A review of the structure and stratigraphy of Florida, with special reference to the petroleum possibilities: Florida State Geol. Survey, 17th Ann. Rept., pp. 169–275, 1 fig. (map), 1926.

Moulton, Gail Francis.

1855. Petroleum development in Illinois during 1924: Am. Inst. Min. and Met. Eng., Trans. [preprint] no. 1441, 7 pp., March, 1925.

1856. Carbon ratios and petroleum in Illinois: Illinois State Geol. Survey, Rept. of Investigations no. 4, 18 pp., 5 figs., 1925.

1857. Proper testing for oil structures in Illinois and some areas deserving such testing: Illinois State Geol, Suryey, Rept. of Investigations no. 6, 22 pp., 9 figs., 1925.

1858. Further contributions to the geology of the Allendale oil field, with a revised structure map: Illinois State Geol. Survey, Report of Investigations no. 7, 27 pp., 12 figs., 4 pls. (incl. map), 1925.

1859. Some features of red bed bleaching: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 3, pp. 304-311, 3 figs., March, 1926.

1860. (and Miser, Hugh D., and Logan, W. N.). Petroleum developments in the Mississippi Valley region during 1925; Am. Inst. Min. and Met. Eng., no. 1570 (Petroleum development and technology in 1925). pp. 643-652, April, 1926; abstract, Mining and Metallurgy, vol. 7, no. 231, p. 137, March, 1926.

1861. Oil and gas possibilities near Sparta: Illinois State Geol. Survey, Press Bull. Ser., Illinois Petroleum, no. 1, pp. 2-7, map, April 17,

1926.

1862. Petroleum developments during 1925 [in Illinois]: Illinois State Geol.
Survey, Press Bull. Ser., Illinois Petroleum, no. 1, pp. 7-8, April
17, 1926.

Moulton, Gail Francis-Continued.

1863. (and Weller, J. Marvin). Prospecting for Hoing sand oil pools: Illinois State Geol. Survey, Press Bull. Ser., Illinois Petroleum, no. 2, pp. 3-4, May 29, 1926.

1864. Recent petroleum developments in Illinois: Illinois State Geol. Survey,
Press Bull. Ser., Illinois Petroleum, no. 2, pp. 5-6, May 29, 1926.

1865. The bearing of the structural relations between the Pennsylvanian and older formations on petroleum prospecting in western Idinois: Illinois State Geol. Survey, Press Bull. Ser., Illinois Petroleum, no. 3, pp. 1–7, 4 figs., July 24, 1926.

1866. Current oil field operations in Illinois: Illinois State Geol. Survey, Press Bull. Ser., Illinois Petroleum, no. 3, pp. 10–14, July 24, 1926.

1867. Areas for further prospecting near the Martinsville pool, Clark County: Illinois State Geol. Survey, Press Bull. Ser., Illinois Petroleum, no. 4, pp. 1–5, 1 fig., August 28, 1926.

1868. Oil field water investigations—Waterloo field: Illinois State Geol. Survey, Press Bull. Ser., Illinois Petroleum, no. 5, pp. 11–15, 2 figs., October 16, 1926.

Müllerried, Friedrich K. G.

1869. (and Scheuble, Hugo). Ueber die Tätigkeit des Popocatepetl (Mexiko) vom November 1923 bis März 1924: Žeitschr. Vulkanologie, Bd. 9, H. 1, pp. 52–55, 2 pls., August, 1925.

Muilenburg, Garrett A.

1870. Geology of the Tarryall district, Park County, Colorado: Colorado Geol. Survey, Bull. 31, 64 pp., 10 pls. (incl. map), May, 1925.

Múñoz Lumbier, Manuel.

1871. Glosario de voces de geología y geografía física: Mexico, Departamento de exploraciones y estudios geológicos, Folleto de divulgación, no. 11, 61 pp., January, 1924.

Musser, E. H.

1872. Report on the Torrance oil field: California State Min. Bur., Summary of Operations California Oil Fields, vol. 11, no. 3, pp. 5–17, 3 figs., 2 pls., September, 1925.

1873. The Rosecrans oil field: California State Min. Bur., Summary of Operations California Oil Fields, vol. 11, no. 5, pp. 5–21, 3 figs., November, 1925.

1874. The Richfield oil field: California State Min. Bur., Summary of Operations California Oil Fields, vol. 12, no. 6, pp. 5–18, 2 figs., 3 pls. (incl. map), December, 1926.

Myers, William Marsh.

1875. (and Anderson, C. O.). Garnet; its mining, milling, and utilization: U. S., Bur. Mines, Bull. 256, 54 pp., 3 figs., 3 pls., 1925.

1876. (and Peck, Albert B.). A fulgurite from South Amboy, New Jersey:
Am. Mineralogist, vol. 10, no. 6, pp. 152–155, June, 1925; abstract,
Pan-Am. Geologist, vol. 44, no. 2, pp. 159–160, September, 1925.

1877. The mineralogy of some commercial garnets: Am. Jour. Sci., 5th ser., vol. 12, pp. 115-118, August, 1926.

Naething, Foster S.

1878. The Oklahoma-Kansas-Missouri zinc-lead field: Eng. and Min. Jour., vol. 122, no. 16, pp. 604–608, October 16, 1926.

Nakashima, Kinzo.

1879. A new method for measuring refractive indices under the microscope: Jour. Geology, vol. 34, no. 3, pp. 235-247, 6 figs., April-May, 1926.

Navarro, Daniel V.

1880. Reseña minera del Estado de Jalisco: Bol. minero, t. 22, no. 4, pp. 166-259, 12 pls. (incl. maps), October, 1926.

Nelson, Richard Newman.

1881. Geology of the hydrographic basin of the upper Santa Ynez River, California: California, Univ., Dept. Geol. Sci., Bull., vol. 15, no. 10, pp. 327-396, 13 figs., 4 pls., May 27, 1925.

1882. A contribution to the paleontology of the Martinez Eocene of California: California, Univ., Dept. Geol. Sci., Bull., vol. 15, no. 11, pp. 397–466, 13 pls. (incl. map), September 24, 1925.

Nelson, Wilbur Armistead. See also Butts, 360.

1883. Mascot, Tennessee, zinc area: Mining and Metallurgy, vol. 5, no. 214, pp. 469-471, October, 1924; Am. Inst. Min. and Met. Eng., Trans., vol. 71, pp. 289-298; also [preprint] no. 1379, 1924.

1884. Ducktown, Tennessee, copper district: Am. Inst. Min. and Met. Eng., Trans., vol. 71, pp. 299–303, 1925; also [preprint] no. 1378, 1924.

1885. The southern Tennessee coal field included in Bledsoe, Cumberland. Franklin, Grundy, Hamilton, Marion, Putnam, Rhea, Sequatchie, Van Buren, Warren, and White counties: Tennessee, Dept. Educ., Div. Geology, Bull. 33-A, 239 pp., 12 figs. (maps), 8 pls., 1925.

1886. The coals and geology of the Herbert Domain: Tennessee, Dept. Educ., Div. Geology. Bull. 33-C, 54 pp., 4 pls. (incl. map), 1925.

1887. Administrative report of the State geologist, 1923-1924: Tennessee, Division of Geology, Bull. 35, 50 pp., 1925.

1888. Two new volcanic ash horizons in the Stones River group of the Ordovician of Tennessee (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 159, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, p. 153, March, 1925.

1889. Observations on different periods of igneous activity at Bauxite,
Arkansas (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p.
167, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, p. 158,
March, 1925.

1890. Geology and evolution: Sci. Monthly, vol. 21, no. 3, pp. 312–316, September, 1925.

1891. Topography and geology of the coal fields [of Tennessee]: U. S., Bur. Mines, Tech. Paper 356, pp. 1-4, 1 fig., 1926.

1892. Volcanic ash deposit in the Ordovician of Virginia (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, pp. 149-150, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 1, p. 96, February, 1926.

Neumann, Frank.

1893. Some remarks on certain earthquakes of 1925; the problem of determining epicenters: Seismological Soc. America, Bull., vol. 15, no. 2, pp. 114–121, June, 1925.

1894. Earthquakes of 1925; the problem of determining epicenters (abstract): Washington Acad. Sci., Jour., vol. 15, no. 13, p. 308, July 19, 1925.

1895. The Texas earthquake of July 30, 1925 (abstract): Seismological Soc. America, Bull., vol. 16, no. 2, p. 158, June, 1926.

Neumann, Frank-Continued.

1896. Seismological report, January, February, March, 1925: U. S. Coast and Geod. Survey, Serial no. 328, 48 pp., 1926.

1897. (and Service, Jerry H.). Seismological report, April, May, June, 1925: U. S. Coast and Geod. Survey, Serial no. 337, 46 pp., 1926.

1898. Seismological report, July, August, September, 1925: U. S. Coast and Geodetic Survey, Serial no. 363, 64 pp., 1926.

Neumann, L. Murray. See Twenhofel, no. 2599, 2603.

Nevin, Charles M. 198 demonstrated and administration of the control of the contr

1899. Albany molding sands of the Hudson Valley: New York State Mus. Bull., no. 263, 81 pp., 26 figs., 1925.

Newhouse, W. H.

1900. Paragenesis of marcasite: Econ. Geology, vol. 20, no. 1, pp. 54-66, 3 figs., January-February, 1925.

1901. An examination as to the intergrowth of certain minerals: Econ, Geology, vol. 21, no. 1, pp. 68-69, January-February, 1926.

Newland, David Hale. See Cushing, 568.

Nicholls, William M.

1902. Geologic section across the middle Salinas Valley of California from the San Antonio River to San Lorenzo Creek (abstract): Geol. Soc. America, Bull., vol 36, no. 1, p. 201, March 30, 1925.

Nicol, John M.

1903. Magmas and ore magmas: Eng. and Min. Jour., vol. 122, no. 20, pp. 778-779, November 13, 1926.

Nicolas, Frank.

1904. Index to paleontology (geological publications [of the Geological Survey of Canada], 1847–1916): Canada, Geol. Survey, 383 pp., 1925.
[Pub. no. 2034]

Noble, Levi F.

1905. Borate deposits in the Kramer district, Kern County, California: U. S. Geol. Survey, Bull, 785, pp. 45-61, 5 figs., October 5, 1926.

1906. Note on a colemanite deposit near Shoshone, California, with a sketch of the geology of a part of Amargosa Valley: U. S. Geol, Survey, Bull, 785, pp. 63-73, 1 fig., October 13, 1926.

1907. The San Andreas rift and some other active faults in the desert region of southeastern California: Carnegie Inst. Washington, Year Book no. 25, 1925–6, pp. 415–428, December, 1926.

Noé, Adolph Charles.

1908. Pennsylvanian flora of northern Illinois: Illinois State Geol. Survey, Bull. 52, 113 pp., 45 pls., 1925.

1909. Coal balls here and abroad: Illinois State Acad. Sci., Trans., vol. 17, pp. 179–180, 1925.

1910. The fossil flora of northern Illinois: Illinois State Acad. Sci., Trans., vol. 18, pp. 206-207, 1925.

1911. Dakota sandstone plants from Cimarron County, Oklahoma: Oklahoma Geol. Survey, Bull. no. 34, pp. 93–107, 7 pls., October, 1925.

1912. American coal balls (abstract): Science, new ser., vol. 62, p. 524, December 4, 1925. Noé. Adolph Charles-Continued.

1913. The fossil flora of Harrisburg, Illinois: Illinois State Acad. Sci., Trans., vol. 19, pp. 283-285, 1926.

1914. Coal ball studies (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 241, March 30, 1926.

Norton, E. A.

1915. The inter-relation of soils and geology (abstract): Illinois State Acad. Sci., Trans., vol. 19, p. 245, 1926.

Norton, William H.

1916. Calcareous nodules of Wapsipinicon terrane (abstract): Pan-Am. Geologist, vol. 46, no. 5, p. 405, December, 1926.

Nutting, Perley Gilman.

1917. Geochemical relations between petroleum, silica, and water: Econ. Geology, vol. 21, no. 3, pp. 234-242, May, 1926.

1918. Pressures in planetary atmospheres: Washington Acad. Sci., Jour., vol. 16, no. 9, pp. 254-258, May 4, 1926.

Ockerman, John W.

1919. Fauna of the Galena limestone near Appleton [Wisconsin]: Wisconsin Acad. Sci., Arts, and Letters, Trans., vol. 22, pp. 99-142, 3 pls., 1926.

Odell, William Wallace.

1920. (and Hood, O. P.). Possibilities for the commercial utilization of peat: U. S., Bur, Mines, Bull. 253, 160 pp., 23 figs., 6 pls., 1926.

Officer, H. G. See Aurin, 76.

O'Harra, Cleophas Cisney.

1921. (and Connolly, Joseph P.). The geology, mineralogy, and scenic features of Custer State Park, South Dakota: South Dakota School of Mines, Bull. no. 14, 123 pp., 5 figs., 60 pls. (incl. maps), January, 1926.

O'Heir, H. B. See Bell, 172.

Oldham, Richard Dixon.

1922. The depth and twofold character of earthquake origins: Jour. Geology, vol. 34, no. 5, pp. 385-398, July-August, 1926.

O'Neill, John Johnston. See Bruce, 313.

Orser, Edward H.

1923. Kirkland Lake, Ontario's second gold district: Eng. and Min. Jour .-Press, vol. 121, no. 8, pp. 317-323, 3 figs., February 20, 1926.

Ortega, Gustavo.

1924. Los recursos petrolíferos mexicanos y su actual explotación: Mexico, Secretaria de Industria, Comercio y Trabajo, Dept. de Petroleo, 49 pp., 36 pls., Mexico, 1925.

Osborn, Henry Fairfield.

1925. Final conclusions on the evolution, phylogeny, and classification of the Proboscidea: Am. Philos. Soc., Proc., vol. 64, no. 1, pp. 17-35, 3 figs., 1925.

1926. The elephants and mastodons arrive in America: Natural History (Am. Mus. Nat. Hist., Jour.), vol. 25, no. 1, pp. 3-23, 17 figs., 1 pl., January-February, 1925.

86012-28-9

1927. The hall of the age of man: Am. Mus. Nat. Hist., Guide Leaflet series no. 52, 48 pp., 32 figs., May, 1925.

1928. The origin of species as revealed by vertebrate paleontology; a rejoinder to William Bateson (abstract): Science, new ser., vol. 61, pp. 523-524, May 15, 1925.

1929. The origin of species as revealed by vertebrate paleontology: Nature, vol. 115, pp. 925–926, 961–963, June 13 and 20, 1925.

1930. The origin of species, II; Distinctions between rectigradations and allometrons: Nat. Acad. Sci., Proc., vol. 11, no. 12, pp. 749-752, December 15, 1925.

1931. The evolution of human races. Natural History (Am. Mus. Nat. Hist., Jour.), vol. 26, no. 1, pp. 3-13, 4 figs., January-February, 1926.

1932. The origin of species, 1859–1925; Yale Univ., Peabody Mus. Nat. Hist., Bull. 1, no. 1, pp. 25–38, 1926; Sci. Monthly, vol. 22, no. 3, pp. 185–192, March, 1926.

1933. The problem of the origin of species as it appeared to Darwin in 1859 and as it appears to us to-day: Nature, vol. 118, pp. 270-273, August 21, 1926 [and correction], p. 591, October 23, 1926; Science, new ser., vol. 64, pp. 337-341, October 8, 1926; abstract, Pan-Am. Geologist, vol. 46, no. 4, pp. 335-336, November, 1926.

1934. J. L. Wortman; a biographical sketch: Natural History (Am. Mus. Nat. Hist., Jour.), vol. 26, no. 6, pp. 652–653, portr., November–December, 1926.

1935. Additional new genera and species of the mastodontoid Proboscidea: Am. Mus. Novitates, no. 238, 16 pp., 12 figs., November 30, 1926.

Osborne, F. F. See Uglow, 2619.

Owen, Luella Agnes.

1936. Later studies on the loess: Pan-Am. Geologist, vol. 45, no. 5, pp. 377-382, June, 1926; abstract, no. 2, pp. 173-174, March, 1926.

Pack, Frederick James.

1937. New discoveries relating to the Wasatch fault; Am. Jour. Sci., 5th ser., vol. 11, pp. 399-410, 6 figs., May, 1926; abstract, Geol. Soc. America, Bull., vol. 37, no. 1, p. 182, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, p. 170, March, 1926.

Paige, Sidney. See also Darton, 589.

1938. (and Foran, W. T., and Gilluly, James). A reconnaissance of the Point Barrow region, Alaska: U. S. Geol. Survey, Bull. 772, 33 pp., 4 figs., 9 pls. (incl. map), 1925.

1939. Earthquakes: Sci. Monthly, vol. 20, no. 6, pp. 611-616, June, 1925.

1940. La Plata formation in the plateau country (abstract): Pan-Am. Geologist, vol. 44, no. 1, pp. 76-77, August, 1925.

Palache, Charles. See also Bauer, 153; Daly, 585.

1941. (and Vassar, Helen E.). Some minerals of the Keweenawan copper deposits; pumpellyite, a new mineral; sericite; saponite: Am.
Mineralogist, vol. 10, no. 11, pp. 412-418, November, 1925.

1942. Catalogue of the collection of meteorites in the mineralogical museum of Harvard University: Am. Acad. Arts and Sci., vol. 61, no. 6, pp. 151-159, May, 1926.

Palache, Charles-Continued.

1943. Notes on new or incompletely described meteorites in the mineralogical museum of Harvard University: Am. Jour. Sci., 5th ser., vol. 12, pp. 136-150, August, 1926.

1944. (and Vassar, Helen E.). A note on cyanotrichite: Am. Mineralogist, vol. 11, no. 8, pp. 213-214, August, 1926.

Palmer, Harold Schjöth.

1945. Structure of the South Mountain laccolith, Fergus County, Montana: Am. Jour. Sci., 5th ser., vol. 10, pp. 119-133, 4 figs., August, 1925.

Palmer, Katherine Van Winkle.

1946. The Veneridae of eastern America; Cenozoic and recent: Palaeontographica Americana, vol. 1, no. 5, pp. 209-428, 35 figs., — pls., 1926.

Palmer, Robert H.

1947. Tectonic setting of Lago de Chapala [Mexico]: Pan-Am. Geologist, vol. 45, no. 2, pp. 125-134, 2 pls., March, 1926.

1948. Upper Pleistocene occurrence along the Oaxaca coast of Mexico: Science, new ser., vol. 63, p. 476, May 7, 1926.

Pardee, Joseph Thomas. See also Richards, 2107.

1949. Geology and ground-water resources of Townsend Valley, Montana: U. S. Geol. Survey, Water-Supply Paper 539, 61 pp., 7 figs. (incl. map), 2 pls., 1925.

1950. (and Bryan, Kirk). Origin of fossiliferous Latah clays and associated basalts near Spokane [Washington] (abstract): Pan-Am. Geologist, vol. 43, no. 5, pp. 369-370, June, 1925.

1951. (and Bryan, Kirk). Geology of the Latah formation in relation to the lavas of Columbia Plateau near Spokane, Washington: U. S. Geol. Survey, Prof. Paper 140, pp. 1-16, 3 figs., 7 pls. (incl. map), February 19, 1926.

1952. The Montana earthquake in relation to the geology of the region (abstract): Seismological Soc. America, Bull., vol. 16, no. 2, p. 157, June, 1926.

1953. The Montana earthquake of June 27, 1925; U. S. Geol. Survey, Prof. Paper 147, pp. 7-23, 11 pls. (incl. maps), September 20, 1926.

Paredes, Trinidad.

1954. Circulación de las aguas subterráneas en la falda occidental del Iztaccihuatl: Mexico, Inst. geol., Anales, t. 2, nos. 1-3, pp. 18-37,

1955. Algunos criaderos de fierro en los estados de Guanajuato, Jalisco y Michoacán: Bol. minero, t. 20, no. 1, pp. 9-27, 1 pl. (map), July, 1925.

1956. "La Ferrería" de valle de Bravo, Estado de México: Bol. minero, t. 22, no. 1, pp. 29-40, 1 pl. (map), July, 1926.

Park, James.

1957. Sudbury ore deposits: Econ. Geology, vol. 20, no. 5, pp. 500-504, August, 1925.

Park, John Furness.

1958. Mining methods of Jarbidge district [Nevada]: Am, Inst. Min. and Met. Eng., Trans. [preprint] no. 1400, 11 pp., 3 figs., January, 1925.

Parkins, A. E.

1959. The sand dunes of Lake Michigan: Tennessee Acad. Sci., Jour., vol. 1, no. 3, pp. 12, 15, July, 1926.

Parkinson, John.

- 1960. A note on the petrographical characters of some rocks from the Northern Range of Trinidad: Geol. Mag., vol. 62, pp. 133–136, 1 fig., March, 1925.
- 1961. The Central Range of Trinidad: Geol. Mag., vol. 63, pp. 383–384, August, 1926.

Parks, E. M.

1962. Water analyses in oil production and some analyses from Poison Spider, Wyoming: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 6, pp. 927–946, 3 figs., September, 1925.

Parks, William Arthur.

- 1963. The stratigraphy and paleontology of Toronto and vicinity, Part VI; Stratigraphy and correlation of the Dundas formation: Ontario Dept. Mines, 32d Ann. Rept., vol. 32, pt. 7, pp. 89-116, 2 figs., 1925.
- 1964. The stratigraphy and paleontology of Toronto and vicinity: addenda et corrigenda: Ontario Dept. Mines, 32d Ann. Rept., vol. 32, pt. 7, pp. 35–38, 1 pl., 1925.
- 1965. Struthiomimus brevetertius, a new species of dinosaur from the Edmonton formation of Alberta: Roy. Soc. Canada, Proc. and Trans., 3d ser., vol. 20, pt. 1, sec. 4, pp. 65-70, 1 fig., 1 pl., 1926.
- 1966. Arrhinoceratops brachyops, a new genus and species of Ceratopsia from the Edmonton formation of Alberta: Toronto, Univ., Studies, Geol. ser., no. 19, 15 pp., 2 pls., 1925.
- 1967. New genus and species of horned dinosaur from the Cretaceous of Alberta (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 226, March 30, 1925.
- 1968. Buried Indian workshop with remains of an extinct mammal [in Saskatchewan]: Geol. Soc. America, Bull., vol. 36, no. 2, pp. 429-434, 1 pl., June 30, 1925; abstract, no. 1, pp. 225-226, March 30, 1925.
- 1969. Cultural aspects in geology: Nature, vol. 116, pp. 432–435, September 19, abstract, p. 340, August 29, 1925; Pan-Am. Geologist, vol. 44, no. 3, pp. 161–186, October, 1925; British Assoc. Adv. Sci., Rept. 93d Meeting, pp. 55–74, 1926.
- 1970. The Paleozoic strata at Toronto [Ontario] (abstract): British Assoc. Adv. Sci., Rept. 92d Meeting, p. 379, 1925.
- 1971. The dinosaurs of Alberta (abstract): British Assoc, Adv. Sci., Rept. 92d Meeting, p. 381, 1925.
- 1972. Time and life: Roy. Soc. Canada, Proc. and Trans., 3d ser., vol. 20, pp. lxv-xxxv, 1926.
- 1973. Thescelosaurus warreni, a new species of orthopodous dinosaur from the Edmonton formation of Alberta: Toronto, Univ., Studies, Geol, ser. no. 21, 42 pp., 18 figs., 2 pls., 1926.
- 1974. Canada's resources in building stone: Canadian Inst. Min. and Met., Bull. no. 156, pp. 367–386, 3 figs., April, 1925; Trans., vol. 28, pp. 141–160, 3 figs. [1926].

Parsons, Arthur B.

1975. The Tintic Standard mine [Tintic district, Utah]: Eng. and Min. Jour.-Press, vol. 120, no. 17, pp. 645-652, 7 figs., October 24, 1925.

- Parsons, Arthur Leonard. See also Walker, 2699, 2700, 2701, 2702, 2703, 2705, 2706, 2707, 2708, 2709, 2710.
- 1976. Albertite in gypsum from Hillsboro, New Brunswick: Toronto, Univ., Studies, Geol. ser., no. 20, pp. 33-34, 1925.
 - 1977. Additional data concerning the preservation of minerals: Am. Mineralogist, vol. 11, no. 4, pp. 79-82, April, 1926.

Patton, Horace Bushnell,

1978. Underground water possibilities for stock and domestic purposes in the La Junta area, Colorado: Colorado Geol, Survey, Bull. 27, pt. 1, pp. 1–72, 4 figs., 2 pls. (incl. map), 1924.

Patton, Leroy T. See also Sellards, 2286.

- 1979. (and Hicks, Clifford). Notes on the occurrence of glacial material beyond the border of the drift in Muskingum County, Ohio: Ohio Jour. Sci., vol. 25, no. 2, pp. 97-98, March, 1925.
- 1980. The sandstone dikes around Rockwall, Texas: Holland's Mag., Dallas, Texas, vol. 44, no. 6, pp. 5, 86, 4 figs., June, 1925.
- 1981. Geology and the location of dams on the Canadian River, Texas: Econ. Geology, vol. 20, no. 5, pp. 464-469, August, 1925.
- 1982. The stratigraphy of western Oklahoma and adjacent parts of Texas:

 Am. Jour. Sci., 5th ser., vol. 12, pp. 193-197, 1 fig., September, 1926,

Patton, M. J.

1983. The coal resources of Canada: Econ. Geography, vol. 1, no. 1, pp. 73-88, 18 figs., March, 1925. Reprint, Queen's Univ., Kingston, Ontario, Bull. Dept. History . . . no. 50, 19 pp., February, 1925.

Paxson, Roland B. See Barton, 125.

Peck, Albert B. See also Myers, 1876.

1984. Changes in the constitution and microstructure of andalusite, cyanite, and sillimanite at high temperatures and their significance in industrial practice: Am. Mineralogist, vol. 10, no. 9, pp. 253–280, 11 figs., September, 1925; Am. Ceramic Soc., Jour., vol. 8, no. 7, pp. 407–429, 11 figs., July, 1925.

1985. The time factor in the formation of some artificial minerals: Jour. Geology, vol. 34, no. 1, pp. 65-70, 1 fig., January-February, 1926.

1986. Dumortierite as a commercial mineral: Am. Mineralogist, vol. 11, no. 4, pp. 96-101, April, 1926.

Peck, Frederick Burritt.

1987. Vanport limestone of Lawrence County: Pennsylvania Geol. Survey, 4th ser., Bull. M7, pp. 292–304, 1 fig., 1 pl., 1925.

Peele, Robert.

1988. James Furman Kemp: Eng. and Min. Jour., vol. 122, no. 22, p. 872, portr., November, 27, 1926.

Penrose, Richard Alexander Fullerton, jr.

1989. Memorial to John Casper Branner: Geol. Soc. America, Bull., vol. 36, no. 1, pp. 15-44, portr., March 30, 1925.

1990. Biographical memoir John Casper Branner, 1850–1922: Nat. Acad. Sci., Mem., vol. 21, 3d mem., 20 pp., portr., 1926.

Perkins, Edward H.

1991. (and Smith, Edward S. C.). Contributions to the geology of Maine, No. 1; A geological section from the Kennebec River to Penobscot Bay: Am. Jour. Sci., 5th ser., vol. 9, pp. 204–228, 7 figs. (incl. maps), March, 1925.

1992. Contributions to the geology of Maine, No. 2; Part 1, The Moose River sandstone and its associated formations: Am. Jour. Sci., 5th ser., vol. 10, pp. 368-375, 1 fig. (map), October, 1925.

Perry, E. S. See Kentucky Geological Survey, 1385.

Peterson, Olof August.

1993. The Brown's Park formation: Science, new ser., vol. 63, p. 231, February 26, 1926.

1994. The fossils of the Frankstown cave, Blair County, Pennsylvania; Carnegie Mus., Annals, vol. 16, no. 2, pp. 249-314, 10 figs., 9 pls., March, 1926.

Petry, Loren C.

1995. Fossil plants showing structure from late Devonic rocks of New York (abstract): Pan-Am. Geologist, vol. 44, no. 1, p. 76, August, 1925.

Pettijohn, Francis J.

1996. Intraformational phosphate pebbles of the Twin City Ordovician: Jour. Geology, vol. 34, no. 4, pp. 361-373, 2 figs., May-June, 1926.

Phemister, Thomas Crawford. See also Johannsen, 1276.

1997. A criticism of the application of the theory of assimilation to the Sudbury sheet: Jour. Geology, vol. 33, no. 8, pp. 819–824, November–December, 1925.

1998. Igneous rocks of Sudbury and their relation to the ore deposits:
Ontario Dept. Mines, 34th Ann. Rept., vol. 34, pt. 8, 61 pp., illus.,
1926.

1999. Evidence of assimilation and assimilation processes: Jour. Geology, vol. 34, no. 7, pp. 653-656, October-November, 1926.

Picher, Rodolphe Hector.

2000. Investigations of road materials in New Brunswick and Nova Scotia:
Canada, Mines Branch, Investigations in Ceramics and Road Materials, 1924, pp. 18–45, 1925.

2001. Road materials in eastern Ontario: Canada, Dept. Mines, Mines Branch,
Investigations in Ceramics and Road Materials, pp. 23–29, 1926.

Pike, R. W.

2002. Geological studies in the San Antonio and Nacimiento River valleys, Monterey County, California (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 213, March 30, 1926.

Piper, Arthur M.

2003. Ground water for irrigation on Camas Prairie, Camas and Elmore counties, Idaho: Idaho, Bur. Mines and Geology, Pam. 15, 46 pp., 6 figs., 1 pl. (map) [1926] [mimeographed].

2004. (and Kirkham, Virgil R. D.). Ground water for municipal supply at Idaho Falls, Idaho: Idaho, Bur. Mines and Geology, Pam. no. 16, 13 pp. [1926] [mimeographed].

2005. (and Laney, Francis B.). Geology and metalliferous resources of the region about Silver City, Idaho: Idaho Bur. Mines and Geology, Bull. no. 11, 165 pp., 6 figs., 13 pls. (incl. maps), December, 1926. Pirsson, Louis Valentine.

2006. (and Schuchert, Charles). Introductory geology for use in universities, colleges, schools of science, etc., and for the general reader. Part I, Physical geology, by Louis V. Pirsson; Part II, Outlines of historical geology, by Charles Schuchert, x, 693 pp., illus., map, New York, J. Wiley & Sons, 1924.

2007. Rocks and rock minerals; a manual of the elements of petrology without the use of the microscope. Second edition, revised by Adolph Knopf. 426 pp., 74 figs., 36 pls., New York, John Wiley & Sons,

Platts, John B.

2008. Replacement by ores: Eng. and Min. Jour.-Press, vol. 121, no. 6, pp. 249-250, February 6, 1926.

Plummer, Helen Jeanne.

2009. Foraminifera of the Midway formation in Texas: Texas, Univ., Bull. 'no. 2644, 206 pp., 15 pls. (incl. map), November 22, 1926.

Plyler, E. K.

2010. The growth of ice crystals: Jour. Geology, vol. 34, no. 1, pp. 58-64, 2 figs., January-February, 1926.

Poitevin, Eugene.

2011. Mineralogy at Ottawa: Canadian Min. Jour., vol. 46, no. 9, pp. 227-228, February, 1925.

Pond, W. F. See Greene, 968.

Poor, R. S.

2012. The character and significance of the basal conglomerate of the Pennsylvanian system in southern Illinois: Illinois State Acad. Sci., Trans., vol. 18, pp. 369-375, 1 fig. (map), 1925.

Porter, Charles A. See Beeson, 162; Lindgren, 1588.

Posnjak, E. See Sosman, 2389.

Powers, Sidney.

2013. Structural geology of the Mid-Continent region; a field for research (with discussion by K. C. Heald): Geol. Soc. America, Bull., vol. 36, no. 2, pp. 379-392, June 30, 1925; abstract, no. 1, p. 156, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, p. 151, March, 1925.

2014. Interior salt domes of Texas: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 1, pp. 1-60, 14 figs., 1 pl., January, 1926; Geology of salt dome oil fields, pp. 209-268, 14 figs., 1 pl., 1926.

2015. Effect of salt and gypsum on the formation of Paradox and other valleys of southwestern Colorado (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 168, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, p. 166, March, 1926.

2016. The function of State geological surveys: Econ. Geology, vol. 21, no. 6, pp. 610-612, September, 1926.

2017. Oil and gas in Oklahoma; petroleum geology in Oklahoma: Oklahoma Geol. Survey, Bull. no. 40-G, 24 pp., December, 1926.

Prather, Harold P.

2018. Manitoba, a potential Canadian mining area: Eng. and Min. Jour., vol. 122, no. 23, pp. 887-893, 4 figs., December 4, 1926.

Pratt, Wallace E.

2019. (and Johnson, Douglas W.). Recent local subsidence of the Gulf coast of Texas (abstract): Geol. Soc. America, Bull., vol. 37, no. 1. p. 169, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, pp. 166–167, March, 1926.

2020. (and Sellards, E. H.). Depression of Goose Creek oil field, Texas (abstract): Pan-Am, Geologist, vol. 45, no. 3, p. 254, April, 1926.

2021. An earthquake in the Panhandle of Texas [July 30, 1925]: Seismological Soc. America, Bull., vol. 16, no. 2, pp. 146–149, 1 pl., June, 1926.

2022. (and Johnson, Douglas W.). Local subsidence of the Goose Creek oil field [Texas]: Jour. Geology, vol. 34, no. 7, pp. 577-590, 6 figs., October-November, 1926.

2023. Two new salt domes in Texas [Moss Bluff and Boggy Creek domes]:

Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 11, pp. 11711172, November, 1926.

Prescott, Basil.

2024. The underlying principles of the limestone replacement deposits of the Mexican province: Eng. and Min. Jour., vol. 122, no. 7, pp. 246-253, no. 8, pp. 289-296, 11 figs., August 14 and 21, 1926.

Price, George McCready.

2025. Evolutionary geology and the new catastrophism. 352 pp., 91 figs., Pacific Press Publishing Association, Mountain View, California, 1926.

Price, Paul H. See Reger, 2089.

Price, William Armstrong.

2026. Caliche and pseudo-anticlines; Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 6, pp. 1009–1017, 2 figs., September, 1925.

2027. Gas and oil near Edna, Jackson County, Texas: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 9, p. 905, September, 1926.

Prindle, Louis Marcus.

2028. (and Stoddard, B. H.). Talc and soapstone in 1924: U. S. Bur. Mines, Mineral Resources U. S., 1924, pt. 2, pp. 339-346, 1 fig., June 8, 1926.

Prouty, William Frederick.

2029. Structural conditions in west central Appalachians (abstract): Elisha Mitchell Sci. Soc., Jour., vol. 41, nos. 1–2, pp. 23–24, September, 1925.

2030. Triassic basin west of Raleigh (abstract): Elisha Mitchell Sci. Soc., Jour., vol. 41, nos. 1-2, pp. 24-26, September, 1925.

2031. Relation of rock character and structure to topography in the central belt of the folded Appalachians (abstract): Elisha Mitchell Sci. Soc., Jour., vol. 41, nos. 1-2, pp. 44-46, September, 1925.

2032. Faunas of the Devonian, Silurian, and Ordovician periods: West Virginia Geol. Survey, Mercer, Monroe, and Summers counties, pp. 860-867, 1926.

2033. The Triassic of the Durham Basin (abstract): Elisha Mitchell Sci. Soc., Jour., vol. 42, nos. 1-2, pp. 22-24, October, 1926.

Putnam, George R.

2034. The equilibrium theory of the earth's crust: Washington Acad. Sci., Jour., vol. 16, no. 11, pp. 285-291, June 4, 1926.

Putnam, Palmer Cosslet.

2035. A chart showing the chemical relationships in the mineral kingdom, 31 pp., chart, New York, John Wiley & Sons, 1925.

2036. The existence of a once homogeneous magma-mass underlying Central America: Jour. Geology, vol. 34, no. 8, pp. 807–823, 6 figs., November-December, 1926.

Q., H. M.

2037. Obituary, W. L. Uglow: Canadian Min. Jour., vol. 47, no. 37, p. 885, September 10, 1926.

Quintero, Rodolfo Martínez.

2038. Estudio microscópico de las arenas volcánicas del Popocatepetl: Mexico, Inst. geol., Anales, t. 2, nos. 1–3, pp. 61–63, 1925.

Quirke, Terence Thomas. See also Collins, 500.

2039. Elements of geology. 414 pp., 147 figs., New York, Henry Holt and Company, 1925.

2040. Potholes and certain features of glacial abrasion: Illinois State Acad. Sci., Trans., vol. 17, pp. 194–198, 4 pls., 1925.

2041. Some features of continental glaciation: Illinois State Acad. Sci., Trans., vol. 18, pp. 394–400, 3 figs., 1 pl., 1925.

2042. Correlation of the Huronian and Grenville rocks of southeastern Ontario (abstract): British Assoc. Adv. Sci., Rept. 92d Meeting, p. 390, 1925.

2043. Origin of sedimentary iron ores (discussion): Econ. Geology, vol. 20, no. 8, pp. 770-771, December, 1925.

2044. Huronian-Grenville relations: Am. Jour. Sci., 5th ser., vol. 11, pp. 165-173, February, 1926.

2045. Mineral deposits of Rutter map area, Sudbury district, Ontario: Canada, Geol. Survey, Summ. Rept., 1924, pt. C, pp. 89-95, 1 fig., 1926.

Rader, Clarence M. See Estabrook, 756.

Ramsay, Wilhelm.

2046. The probable solution of the climate problem in geology: Smithsonian Inst., Ann. Rept., 1924, pp. 237–248, 1 fig., 1925.

Ramsdell, Lewis S.

2047. The crystal structure of some metallic sulphides: Am. Mineralogist, vol. 10, no. 9, pp. 281–304, 1 fig., September, 1925.

2048. Crystal structure of the pyrite group (abstract): Pan-Am. Geologist, vol. 44, no. 2, p. 152, September, 1925.

Ransome, Frederick Leslie.

2049. Basin range structure at Jerome, Arizona: Science, new ser., vol. 61, pp. 659-660, 1 fig., June 26, 1925.

2050. Some possible lines of research on ore deposits: Econ. Geology, vol. 20, no. 5, pp. 485–490, August, 1925.

2051. On teaching economic geology: Econ. Geology, vol. 21, no. 5, pp. 498–501, August, 1926.

Rathbun, Mary Jane. See also Wade, 2685.

2052. The fossil stalk-eyed Crustacea of the Pacific slope of North America:
U. S. Nat. Mus., Bull. 138, 155 pp., 6 figs. 39 pls., 1926.

Raymond, Percy Edward.

2053. Report on invertebrate paleontology: Harvard Coll., Mus. Comp. Zoology, Ann. Rept. Director, 1924-5, pp. 21-22, 1925.

Raymond, Percy Edward-Continued.

2054. A possible factor in the formation of dolomite (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 168, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, p. 158, March 30, 1925.

2055. Mechanical factors in the evolution of the tetrabranchiate cephalopods (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, pp. 228-239, March 30, 1925.

2056. Some trilobites of the lower middle Ordovician of eastern North America: Harvard Coll., Mus. Comp. Zoology, Bull., vol. 67, no. 1, pp. 1–180, 10 pls., April, 1925.

2057. The Anaspida and the problem of the origin of the vertebrates: Am. Jour. Sci., 5th ser., vol. 10, pp. 433–436, November, 1925.

2058. Two new fossil fishes from Alberta: Am. Jour. Sci., 5th ser., vol. 10, pp. 551-555, 2 figs., December, 1925.

2059. A new oyster from the Cretaceous of Cuba: Boston Soc. Nat. Hist., Occ. Papers, vol. 5, pp. 183–185, 1 pl., December, 1925.

2060. Report on invertebrate paleontology: Harvard Coll., Mus. Comp. Zoology, Ann. Rept. Director, 1925–6, pp. 21–22, 1926.

Reagan, Albert B.

b

2061. Identification of two fossil leaves from Iowa, one from Arizona, and a "tree trunk" from Kansas: Indiana Acad. Sci., Proc., vol. 34, pp. 141-142, 1 fig., 1925.

2062. Petrified forest of Ganado [Arizona]: Pan-Am. Geologist, vol. 43, no. 2, pp. 97-98, March, 1925.

2063. Life and mythology of Ganado petrified forest: Pan-Am. Geologist, vol. 43, no. 3, pp. 238-239, April, 1925.

2064. Late Cretacic formation of Black Mesa, Arizona: Pan-Am. Geologist, vol. 44, no. 4, pp. 285-294, 1 pl., November, 1925.

2065. Description of some fossil plants from the Stanford paleontological collection: Indiana Acad. Sci., Proc., vol. 35, pp. 121–123, 7 figs., 1926.

2066. Fossil plants from St. John collection (abstract): Pan-Am. Geologist, vol. 45, no. 3, p. 251, April, 1926.

2067. Extension of Cretacic Laramie formation into Arizona: Pan-Am. Geologist, vol. 46, no. 3, pp. 193-194, 1 pl., October, 1926.

Redfield, Arthur H.

2068. The petroliferous systems of South America, Central America, and the West Indies: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 2, pp. 1207–1244 [1924].

Reed, Fredda Doris.

2069. Flora of an Illinois coal ball: Bot. Gazette, vol. 81, no. 4, pp. 460-469, 1 fig., 1 pl., June, 1926.

Reed, Lyman C.

2070. The Welsh, Louisiana, oil field: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 3, pp. 464-478, 6 figs., May-June, 1925; Geology of salt dome oil fields, pp. 437-451, 6 figs., 1926.

Reed, R. D. See also Rogers, 2137.

2071. The post-Monterey disturbance in the Salinas Valley, California: Jour. Geology, vol. 33, no. 6, pp. 588-607, 3 figs., August-September, 1925.

2072. Miocene paleogeography in the central Coast Ranges [California]: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 2, pp. 130-137, 1 fig., February, 1926. Reed, R. D.-Continued.

2073. Effect of the wind in San Joaquin and Salinas valleys (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, pp. 214-215, March 30, 1926.

2074. Aragonite concretions from the Kettleman Hills, California: Jour. Geology, vol. 34, no. 8, pp. 829-833, 2 figs., November-December,

Reeds, Chester Albert.

2075. Glacial Lake Hackensack and adjacent lakes (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 155, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, p. 151, March 30, 1925.

2076. The varved clays at Little Ferry, New Jersey: Am. Mus. Novitates, no. 209, 16 pp., 10 figs., February 17, 1926.

2077. Subterranean streams of the "Endless Caverns," Virginia (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 171, March 30, 1926; Pan.-Am. Geologist, vol. 45, no. 2, p. 167, March 30, 1925.

2078. Varved clays at Haverstraw, New York (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, pp. 180-181, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, pp. 169-170, March 30, 1925.

2079. New York City as a field for earthquake study: Science, new ser., vol. 63, pp. 415-418, April 23, 1926.

2080. The Arbuckle Mountains, Oklahoma: Natural History (Am. Mus. Nat. Hist., Jour.), vol. 26, no. 5, pp. 463-474, 11 figs. (incl. map), September-October, 1926.

Reeside, John Bernard, jr. See also Darton, 594; Gilluly, 902; Spieker, 2395, 2397.

2081. A comparison of the genera Metaplacenticeras Spath and Placenticeras Meek: U. S. Geol. Survey, Prof. Paper 147, pp. 1-5, 2 pls., August 25, 1926.

Reeves, Frank.

2082. Shallow folding and faulting around the Bearpaw Mountains: Am. Jour. Sci., 5th ser., vol. 10, pp. 187-200, 6 figs., September, 1925; abstract, Pan-Am. Geologist, vol. 44, no. 1, pp. 78-79, August, 1925.

Reeves, John R.

2083. A section through the New Albany shale: Indiana, Dept. Conservation, 4th Ann. Rept., pp. 18-21, 1 fig., 1923.

2084. The production of oil in Indiana: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 2, pp. 317-325, 1 fig. (map), March-April, 1925.

2085. The value of relief models and a simple method for their construction: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 2, pp. 340-341, March-April, 1925.

2086. An inclusion of petroleum in a fossil cast [Bloomington, Indiana]: Am, Assoc. Petroleum Geologists, Bull., vol. 9, no. 3, p. 667, May-June, 1925.

2087. Concerning the accumulation of oil: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 6, pp. 1023-1024, September, 1925.

Reger, David Bright.

2088. First test of the Clinton oil sand in West Virginia: Am. Inst. Min. and Met. Eng., Trans. [preprint], no. 1447, pp. 72-77. 1 fig., April, 1925.

Reger, David Bright-Continued.

2089. (assisted by Paul H. Price). Mercer, Monroe, and Summers counties:
West Virginia Geol. Survey, 963 pp., 30 figs., 34 pls., 6 maps (in atlas), 1926.

2090. Paleobotany and paleontology; introduction [and list of fossil localities]: West Virginia Geol. Survey, Mercer, Monroe, and Summers counties, pp. 799–836, 844–846, 1926.

2091. Smokeless coals of West Virginia: Coal Age, vol. 29, no. 18, pp. 633–637, 7 figs., May 6, 1926.

Reid, Harry Fielding. See also Bowie, 249.

2092. The influence of friction on seismographs: Seismological Soc. America, Bull., vol. 15, no. 3, pp. 222–241, 2 figs., September, 1925.

2093. Earthquakes and the weather: Geog. Rev., vol. 16, no. 1, pp. 152-153, January, 1926.

2094. Dynamics of faulting (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 166, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, pp. 164–165, March, 1926.

Reid, John Allen.

2095. Discussion on "The gold deposits of Nova Scotia," by Sir Stopford Brunton: Canadian Inst. Min. and Met., Bull., no. 173, pp. 1039– 1044, September, 1926.

Renick, B. Coleman. See also Meinzer, 1751.

2096. Airplanes for geologic explorations in inaccessible regions: Am. Assoc.

Petroleum Geologists, Bull., vol. 9, no. 6, pp. 947–957, 4 pls.,

September, 1925.

2097. California oil field waters (discussion): Econ. Geology, vol. 20, no. 7, pp. 697-698, November, 1925.

2098. The geology and artesian water prospects in the San Jose-Rio Puerco valley, in Sandoval County, New Mexico: New Mexico, State Engineer, 7th Bienn. Rept., pp. 61–75, 1 fig. [1926].

2099. Geology and ground water resources of the drainage basin of the Rio Penasco above Hope, New Mexico (with an introduction by O. E. Meinzer): New Mexico, State Engineer, 7th Bienn. Rept., pp. 103– 138, 4 figs., 1 pl. [1926].

2100. Petrology of a portion of Malheur County, Oregon (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, pp. 151-152, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, p. 158, March, 1926.

Rettger, R. E.

2101. The bauxite deposits of southeastern Alabama: Econ. Geology, vol. 20, no. 7, pp. 671–686, 3 figs., November, 1925.

Rich, Arthur.

2102. Geology of southeastern New Mexico: Oil and Gas Jour., vol. 25, no. 8, pp. 130-131, map, July 15, 1926.

Rich, John Lyon.

2103. Buried Pennsylvanian channels and sand bars of eastern Kansas (abstract); Geol. Soc. America, Bull., vol. 37, no. 1, p. 159, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, p. 161, March, 1926.

2104. Shoestring oil pools of eastern Kansas: Oil and Gas Jour., vol. 25, no. 1, pp. 62, 65, 68, 70, 3 figs., May 27, 1926.

2105. Further observations on shoestring oil pools of eastern Kansas: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 6, pp. 568-580, 3 figs., June, 1926.

Richards, Gragg.

2106. Veins with fibrous quartz and chlorite from the vicinity of Providence, Rhode Island: Am. Mineralogist, vol. 10, no. 11, pp. 429-433, November, 1925.

Richards, Ralph Webster.

2107. (and Pardee, J. T.). The Melrose phosphate field, Montana: U. S. Geol. Survey, Bull. 780, pp. 1-32, 2 figs., 2 pls., (maps), April 13, 1925.

Richardson, Charles Henry.

2108. The mineralogy of Kentucky; a description of the physical and chemical properties of minerals native to Kentucky: Kentucky Geol. Survey, ser. 6, vol. 27, pp. 1-127, 1925.

Richardson, George Burr.

2109. Natural gas in 1923: U. S. Geol. Survey, Mineral Resources, 1923, pt. 2, pp. 351-358, March 3, 1925,

2110. Petroleum in 1923: U. S. Geol. Survey, Mineral Resources of the United States, 1923, pt. 2, pp. 365-420, 6 figs., 2 pls., August 27, 1925.

2111. (and Coons, A. B.). Petroleum in 1924: U. S., Bur. Mines, Mineral Resources of the United States, 1924, pt. 2, pp. 385-458, 4 figs., October 2, 1926.

Richarz, Stephen.

2112. Eine tertiäre Vergletscherung Alaskas und die Polwanderung: Deutsche geol. Gesell., Zeitschr., Bd. 74, Monatsber., no. 5-7, pp. 180-190, 1922.

2113. Alfred Wegener's theory of origin of the continents: Pan-Am. Geologist, vol. 43, no. 2, pp. 85-96, March, 1925.

2114. Climates of the geologic past: Pan-Am. Geologist, vol. 45, no. 2, pp. 97-108, March, 1926.

2115. Quartz keratophyre from the Porcupine gold area, Ontario: Am. Jour. Sci., 5th ser., vol. 11, pp. 441-442, May, 1926.

2116. Biotic basis of stratigraphy: Pan-Am. Geologist, vol. 46, no. 2, pp. 101-110, September, 1926.

Rickard, Thomas Arthur.

2117. The geologic distribution of gold: Eng. and Min. Jour.-Press, vol. 119, no. 12, pp. 486-487, March 21, 1925.

Ries, Heinrich.

2118. Economic geology. 5th ed., 843 pp., 291 figs., New York, John Wiley & Sons, 1925.

2119. (and Watson, Thomas L.). Engineering geology. 3d ed., 708 pp., 253 figs., 88 pls., New York, John Wiley & Sons, 1925.

2120. Memorial of Thomas L. Watson: Geol. Soc. America, Bull., vol. 36, no. 1, pp. 116-128, portr., March 30, 1925.

2121. Memorial of Thomas L. Watson: Am. Mineralogist, vol. 10, no. 3, pp. 54-57, portr., March, 1925.

2122. Bibliography of clay deposits: Am. Ceramic Soc., Bull., vol. 4, no. 9, pp. 428–510, September, 1925.

Riffenburg, H. B.

2123. Chemical character of ground waters of the northern Great Plains: U. S. Geol, Survey, Water-Supply Paper 560, pp. 31-52, 4 figs., April 21, 1925.

Roark, Louis.

2124. Geology of the Papoose oil field, Okfuskee and Hughes counties, Oklahoma: Oklahoma Geol. Survey, Bull. no. 36, pp. 7–18, 1 fig. (map), February, 1926.

Roberts, D. C.

2125. Methods of identifying subsurface strata for correlative purposes [in California oil fields]: California State Min. Bur., Summary of Operations California Oil Fields, vol. 11, no. 7, pp. 5–26, 3 figs., January, 1926.

Roberts, Hugh M.

2126. Discussion of papers on Sudbury ore deposits: Econ. Geology, vol. 20, no. 4, pp. 382-388, June-July, 1925.

Roberts, Joseph K. See also Kentucky Geol. Survey, 1387.

2127. (and Collins, R. Lee). The Tertiary of west Tennessee: Am. Jour. Sci., 5th ser., vol. 12, pp. 235–243, 1 fig. (map), September, 1926.

Robinson, Arthur Herbert Ashburner. See also Timm, 2564, 2565.

2128. Titaniferous magnetite deposits of Bourget Township, Chicoutimi district, Quebec: Canada, Mines Branch, Investigations of mineral resources and the mining industry, 1924, pp. 42–54, 1 fig., 1926; Quebec, Dept. Colonization . . ., Report on Mining Operations . . . 1925, pp. 46–64, 1 fig., 1926.

2129. Notes on zinc and lead in eastern Canada: Canada, Dept. Mines, Mines Branch, Investigations of mineral resources and the mining industry, 1925, pp. 60–68, 1926.

Robinson, Henry Hollister.

2130. Tenth and eleventh biennial reports of the Commissioners of the State Geological and Natural History Survey of Connecticut, 1921–1924:

Connecticut, State Geol. and Nat. Hist. Survey, Bull. no. 35, 17 pp., 1924.

Robinson, Lewis Cass. See Kentucky Geological Survey, 1394.

Robinson, W. I.

2131. (and Eldridge, W. J.). A method for correlating gumbos: Am. Assoc.

Petroleum Geologists, Bull., vol. 9, no. 5, pp. 906–910, August, 1925.

Roddy, H. Justin.

2132. Problems of calcareous concretions in streams (abstract): Pennsylvania Acad. Sci., Proc., vol. 1, p. 76, 1926.

Rogers, Austin Flint.

2133. Origin of the dolomitic limestone at Argentine, Kansas (abstract):
Geol. Soc. America, Bull., vol. 36, no. 1, pp. 170–171, March 30, 1925;
Pan.-Am. Geologist, vol. 43, no. 2, p. 160, March, 1925.

2134. Kempite, a new manganese mineral from Santa Clara County, California (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 206, March 30, 1925.

2135. Crystal symmetry (abstract with discussion by James B. Macelwane): Geol. Soc. America, Bull., vol. 36, no. 1, pp. 207–208, March 30, 1925.

2136. Friedel's law of rational symmetric intercepts: Am. Mineralogist, vol. 10, no. 8, pp. 181–187, 2 figs., August, 1925.

2137. (and Reed, R. D.). Sand-calcite crystals from Monterey County, California: Am. Mineralogist, vol. 11, no. 2, pp. 23–28, 2 figs., February, 1926.

Rogers, Austin Flint-Continued.

2138. Geology of Cormorant Island, Salton Sea, Imperial County, California (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 219, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 3, pp. 249-250, April, 1926.

2139. A mathematical study of crystal symmetry: Am. Acad. Arts and Sci., Proc., vol. 61, no. 7, pp. 161-203, 48 figs., June, 1926.

2140. The addition and subtraction rule in geometrical crystallography: Am. Mineralogist, vol. 11, no. 11, pp. 303-315, 6 figs., November, 1926.

Rogers, William Ross.

2141. Statistical review of Ontario's mineral industry in 1922: Ontario Dept. Mines, 32d Ann. Rept., vol. 32, pt. 1, 66 pp., 1925.

2142. Statistical review of Ontario's mineral industry in 1923; Ontario, Dept. Mines, 33d Ann. Rept., vol. 33, pt. 1, 63 pp., 1925.

2143. (and Young, A. C.). Statistical review of Ontario's mineral industry in 1924: Ontario Dept. Mines, 34th Ann. Rept., vol. 34, pt. 1, 60 pp.,

2144. District of Patricia, Red Lake, and adjacent areas: Ontario, Dept. Mines, Bull. no. 56, 11 pp., 2 figs., 1 pl. (maps), 1926.

Romer, Alfred Sherwood.

2145. An ophiacodont reptile from the Permian of Kansas: Jour. Geology, vol. 33, no. 2, pp. 173-182, 3 figs., February-March, 1925.

2146. Permian amphibian and reptilian remains described as Stephanospondylus: Jour. Geology, vol. 33, no. 4, pp. 447-463, 5 figs., May-June, 1925.

2147. A lower Miocene horse, Anchitherium agatense (Osborn): Am. Jour. Sci., 5th ser., vol. 12, pp. 325-335, 4 figs., October, 1926.

Roos, Alford.

2148. Mining lepidolite in New Mexico [near Embudo]: Eng. and Min. Jour. Press, vol. 121, no. 26, pp. 1037-1042, 3 figs., June 26, 1926.

Roque Allende - See also Calvache, 387.

2149. Yacimientos metalíficos de Pinar del Río (continuación): Cuba, Dirección de montes y minas, Bol. minas, no. 8, pp. 45-50, 1 fig., August,

2150. (and Lago, Manuel G.). Minas "Caridad" y "Lola" de Camagüey: Cuba, Dirección de montes y minas, Bol. minas, no. 8, pp. 51-56, August, 1925.

2151. Estudio hidrológico de la cuenca del Río Almendares y su relación con los manantiales de Vento: Cuba, Dirección de montes y minas, Bol. minas, no. 9, pp. 33-73, 9 figs., 10 pls. (incl. map), 1926.

Rose, B.

2152. Murphy, Hoyle, and Matheson townships, Porcupine gold area: Ontario Dept. Mines, 33d Ann. Rept., vol. 33, pt. 3, pp. 50-54, map, 1925.

Ross, A. J. M.

2153. Mining methods at the Homestake [Lead, South Dakota]: Am. Inst. Min. and Met. Eng., Trans. [preprint] no. 1408, 22 pp., 21 figs., February, 1925.

Ross, Charles C.

2154. Petroleum and natural gas development in Alberta: Canadian Inst. Min. and Met., Bull., no. 168, pp. 466-495, 10 figs., April, 1926; Trans., vol. 29, pp. 317-346, 10 figs. [1927].

- Ross, Clarence S. See also Miser, 1812, 1813, 1816.
 - 2155. Nephelite-hauynite alnoite from Winnett, Montana: Am. Jour. Sci., 5th ser., vol. 11, pp. 218–227, March, 1926.
 - 2156. Beds of volcanic material as key horizons: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 2, pp. 341–343, March-April, 1925.
 - 2157. (and Shannon, Earl V.). The origin, occurrence, composition, and physical properties of the mineral iddingsite: U. S. Nat. Mus.. Proc., vol. 67, art. 7, 19 pp., 2 pls., May 15, 1925.
 - 2158. (and Shannon, E. V.). Nature of bentonite and related clays (abstract): Pan-Am. Geologist, vol. 43, no. 5, pp. 364-365, June, 1925.
 - 2159. (and Henderson, E. P.). Topaz and associated minerals from the Einstein silver mine, Madison County, Missouri: Am. Mineralogist. vol. 10, no. 12, pp. 441–443, December, 1925.
 - 2160. (and Shannon, Earl V.). The so-called genthite from Webster, North Carolina: Am. Mineralogist, vol. 10, no. 12, pp. 444–445, December,
 - 2161. (and Shannon, Earl V.). The minerals of bentonite and related clays and their physical properties: Am. Ceramic Soc., Jour., vol. 9, no. 2, pp. 77-96, 4 figs., February, 1926.
 - 2162. (and Shannon, Earl V.). Nickeliferous vermiculite and serpentine from Webster, North Carolina: Am. Mineralogist, vol. 11, no. 4, pp. 90-93, April, 1926.
 - 2163. The optical properties and chemical composition of glauconite: U. S. Nat. Mus., Proc., vol. 69, art. 2, 15 pp., 2 figs., May 29, 1926.
 - 2164. Methods of preparation of sedimentary materials for study: Econ. Geology, vol. 21, no. 5, pp. 454-468, 1 fig., August, 1926.
- 2165. A Colorado lamprophyr of the verite type: Am. Jour. Sci., 5th ser., vol. 12, pp. 217-229, September, 1926.
- 2166. (and Shannon, Earl V.). The chemical composition and optical properties of beidellite: Washington Acad. Sci., Jour., vol. 15, no. 21, pp. 467-468, December 19, 1925.
- Ross, Clyde Polhemus. See also Schrader, 2262.
 - 2167. Geology and ore deposits of the Aravaipa and Stanley mining districts, Graham County, Arizona: U. S. Geol. Survey, Bull. 763, 120 pp., 8 figs., 13 pls. (incl. maps), 1925.
 - 2168. Ore deposits of the Saddle Mountain and Banner mining districts, Arizona: U. S. Geol. Survey, Bull. 771, 72 pp., 6 figs., 17 pls. (incl. maps), 1925.
- 2169. The copper deposits near Salmon, Idaho: U. S. Geol. Survey, Bull. 774, 44 pp., 7 figs., 5 pls. (incl. map), 1925.
 - 2170. Tertiary planation in eastern Oregon and central Idaho (abstract): Pan-Am. Geologist, vol. 43, no. 5, p. 367, June, 1925.
 - 2171. Quicksilver in 1924: U. S. Geol. Survey, Mineral Resources U. S., 1924, pt. 1, pp. 13–19, July 30, 1925.
- 2172. A disseminated lead prospect in northern Boise County, Idaho: Idaho, Bur. Mines and Geology, Pam. no. 20, 7 pp., December, 1926.
 [Mimeographed.]
- Rothrock, Edgar Paul.
 - 2173. On the force of crystallization of calcite: Jour. Geology, vol. 33, no. 1, pp. 80-83, January-February, 1925.
 - 2174. Sand and gravel deposits of Yankton County [South Dakota]: South Dakota Geol. and Nat. Hist. Survey, Circular 21, 57 pp., 2 figs., map, May, 1925.

Rothrock, Edgar Paul-Continued.

2175. Geology of Cimarron County, Oklahoma: Oklahoma Geol. Survey, Bull. no. 34, pp. 7-92, 18 figs., 3 pls. (incl. map), October, 1925.

2176. Sand and gravel deposits of Minnehaha; geology: South Dakota Geol, and Nat. Hist. Survey, Circular 26, pp. 7-35, 6 figs. (incl. map), May, 1926.

Roundy, Paul Vere.

2177. Bibliography of conodont and Paleozoic annelid jaw literature: Nat. Research Council, Division of Geology and Geography, 4 pp., Washington, D. C., March 16, 1925 [mimeographed].

2178. Mississippian formations of San Saba County, Texas; Introduction; The micro-fauna: U. S. Geol, Survey, Prof. Paper 146, pp. 1-2, 5-23, 4 pls., 1926.

Rowe, E. P.

2179. Oil and gas possibilities in Ontario: Intercolonial Gas Jour. of Canada, vol. 18, no. 2, pp. 66-68, February, 1925.

Rowe, Jesse Perry.

2180. Petroleum and natural gas in Montana: Eng. and Min. Jour.-Press, vol. 121, no. 14, pp. 563-568, 3 figs., April 3, 1926.

2181. Montana's coal exceeds that of any other State: Coal Age, vol. 30, no. 13, pp. 429-431, 3 figs., September 23, 1926.

Royce, Stephen.

2182. Certain advances in geological information relative to the Lake Superior iron deposits: Lake Superior Min. Inst., Proc. 24th Ann. Meeting, vol. 24, pp. 149-181, 1925.

Rubey, William W. See also Foley, 819; U. S. Geological Survey, 2629.

2183. (and Bass, N. W.). The geology of Russell County, Kansas, with special reference to oil and gas resources: Kansas State Geol. Survey, Bull. 10, pp. 1-86, 11 figs., 7 pls. (incl. maps), 1925.

2184. Determination and use of thicknesses of incompetent beds in oil field mapping and general structural studies: Econ. Geology, vol. 21, no. 4, pp. 333-351, 4 figs., June-July, 1926.

2185. Oil possibilities of the Black Hills region: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 11, p. 1177, November, 1926.

Ruedemann, Rudolf. See also Schuchert, 2266.

2186. The Utica and Lorraine formations of New York; Part 1, Stratigraphy: New York State Mus. Bull., no. 258, 175 pp., 10 figs., 7 pls. (incl. maps), 1925.

2187. The Utica and Lorraine formations of New York; Part 2, Systematic paleontology; No. 1, Plants, sponges, corals, graptolites, crinoids, worms, bryozoans, brachiopods: New York State Mus. Bull., no. 262, 171 pp., 75 figs., 13 pls., June, 1925.

2188. The Utica and Lorraine formations of New York, Part 2, Systematic paleontology; No. 2, Mollusks, crustaceans, and eurypterids: New York State Mus. Bull., no. 272, 227 pp., 26 figs., 28 pls., August, 1926.

2189. Some Silurian (Ontarian) faunas of New York; New York State Mus. Bull., no. 265, 134 pp., 40 figs., 24 pls., 1925.

2190. Siluric faunal facies in juxtaposition: Pan-Am. Geologist, vol. 44, no. 4, pp. 309-312, 1 fig., November, 1925.

86012-28-10

Ruedemann, Rudolf-Continued.

- 2191. [Report on] paleontology and paleobotany: New York State Mus. Bull. no. 267, pp. 32-33, 1926.
- 2192. Faunal facies differences of the Utica and Lorraine shales: New York State Mus. Bull., no. 267, pp. 61–77, 5 figs., 1926.
- 2193. A Devonian starfish from Gaspé: New York State Mus. Bull., no. 267, p. 79, 1 pl., 1926.
- 2194. Neuere amerikanische Theorien über die Entstehung der Kontinente und Ozeane: Geol. Rundschau, Bd. 17a (Festschrift, Gustav Steinmann), pp. 49-61, 7 figs., 1926.
- 2195. Hunting fossil marine faunas in New York State: Natural History (Am. Mus. Nat. Hist., Jour.), vol. 26, no. 5, pp. 505-514, 7 figs., September-October, 1926.

Runner, Joseph James.

2196. Notes on the gold-quartz veins of the Atlantic City-South Pass district, Wyoming: Wyoming, Geologist's Office, Bull. no. 20, pp. 18-23. July 15, 1926.

Russell, J. W.

2197. Evidences of a quite recent extinction of the American mastodon (abstract): British Assoc. Adv. Sci., Rept. 92d Meeting, p. 385, 1925.

Russell, Jeanne.

2198. Glaciation in the Bitterroot Mountains of Montana (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 218, March 30, 1926.

Russell, Loris S.

- 2199. Mollusca of the Paskapoo formation in Alberta: Roy. Soc. Canada,
 Proc. and Trans., 3d ser., vol. 20, pt. 2, sec. 4, pp. 207–220, 3 pls.,
 1926.
- 2200. A new species of the genus *Catopsalis* Cope from the Paskapoo formation of Alberta: Am. Jour. Sci., 5th ser., vol. 12, pp. 230–234, 1 fig., September, 1926.

Russell, Richard Joel.

- 2201. Preliminary statement on the geology of the Warner Range in north-eastern California (abstract); Geol. Soc. America, Bull., vol. 37, no. 1, p. 222, March 30, 1926.
- 2202. Recent horizontal offsets along the Haywards fault: Jour. Geology, vol. 34, no. 6, pp. 507-511, 2 figs., August-September, 1926; abstract, Geol. Soc. America, Bull, vol. 37, no. 1, pp. 211-212, March 30, 1926.

Russell, William L.

- 2203. The possibilities of oil in western Ziebach County: South Dakota Geol. and Nat. Hist. Survey, Circular 20, 25 pp., 4 figs., 1 pl., February, 1995
- 2204. Relation between isocarbs and oil and gas production in Kentucky: Econ. Geology, vol. 20, no. 3, pp. 249–260, 2 figs., May, 1925.
- 2205. Well log in northern Ziebach County: South Dakota Geol. and Nat. Hist. Survey, Circular 18, pp. 3-7, September, 1925.
- 2206. The possibilities of oil in western Corson County: South Dakota Geol. and Nat. Hist. Survey, Circular 27, 18 pp., 5 figs., March, 1926.
- 2207. Structures in western Haakon and eastern Pennington counties: South Dakota Geol, and Nat. Hist. Survey, Circular 28, 24 pp., 5 figs., April, 1926.

Russell, William L.—Continued.

2208. Oil and gas accumulation in the Clinton sand of Ohio: Econ. Geology, vol. 21, no. 6, pp. 538-559, 2 figs., September, 1926,

2209. A quick method for determining porosity: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 10, pp. 931-938, 1 fig., October, 1926.

2210. Porosity and crushing strength as indices of regional alteration; Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 10, pp. 939-952, 1 fig., October, 1926.

Rutherford, Ralph L. See also Allan, 33.

2211. Geology of the foothills belt between McLeod and Athabasca rivers, Alberta: Alberta, Scientific and Industrial Research Council, Rept. no. 11, 82 pp., 8 pls., map, 1925.

2212. Geology of the area between Athabasca and Embarras rivers. Alberta: Alberta, Sci., and Research Council, Geol. Survey Div., Rept. no. 15, 29 pp., 3 pls., map, 1926.

Salazar Salinas, Leopoldo.

2213. Fenómenos geológicos en el valle de México y su influjo sobre la producción de tolyaneras . . . : Soc. cient. Ant. Alz., Mem., t. 46, no. 3-6, pp. 237-277, March-June, 1926.

Sampson, Edward.

2214. Asbestos in 1923: U. S. Geol. Survey, Mineral Resources, 1923, pt. 2, pp. 339-350, 1 fig., February 9, 1925.

2215. Geologic mapping with airplane photographs in Arizona (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 135, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 1, p. 77, February, 1925.

Sánchez Roig, Mario.

2216. La fauna cretácica de la región central de Cuba: Soc. cubana hist. nat. "Felipe Poey," Mem., vol. 7, nos. 1-2, pp. 83-102, 10 pls., 1926.

2217. Los equinodermos fosiles de Cuba: Cuba, Dirección de montes y minas, Bol. minas no. 10, pp. 1-143, 43 pls., December, 1926.

Sanderson, J. O. See Allan, 30.

Santillán, Manuel.

2218. Informe preliminar de varias zonas mineralizadas de la parte central del Estado de Guerrero: Mexico, Departamento de exploraciones y estudios geológicos, Folleto de divulgación, no. 15, 27 pp., map, October, 1925.

2219. Informe preliminar de varias zonas mineralizadas de la parte norte y noroeste del Estado de Guerrero: Mexico, Departamento de exploraciones y estudios geológicos, Folleto de divulgación, no. 18, 17 pp., May, 1926.

Sapper, Karl.

2220. Los volcanes de la América Central. 116 pp., 5 pls. Halle (Saale), Max Niemeyer, 1925. (Estudios sobre América y España, Extra-

2221. El infierno de Masayo; documentos históricos publicados con una introducción: Estudios sobre América y España, Serie geográfica (publicaciones del Instituto americanista de la Universidad de Wuerzburgo), no. 2, 65 pp., 3 pls., Halle (Saale), Max Niemeyer, 1925.

Sapper, Karl-Continued.

2222. Die vulkanische Tätigkeit in Mittelamerika im 20. Jahrhundert: Zeitschr. Vulkanologie, Bd. 9, H. 4 and 5, pp. 156–203, 231–270, 17 figs., 12 pls., February and July, 1926.

2223. Reise in Mittelamerika 1923–24: Deutsch. Geographentag, Breslau, Verh., Bd. 21, pp. 30–49, 1925 [not seen]; abstract, Geol. Zentral-blatt, Bd. 34, no. 5, p. 219, December 1, 1926.

Sardeson, Frederick William,

2224. Ordovicic Crinoidea [Minnesota]: Pan-Am. Geologist, vol. 43, no. 1, pp. 55-68, 1 pl., February, 1925.

2225. Primitive cephalopods from Minnesota: Pan-Am. Geologist, vol. 43, no. 3, pp. 185–204, 2 pls., April, 1925.

2226. Ordovicic kelp, sponges, and sea worms in Minnesota: Pan-Am. Geologist, vol. 43, no. 4, pp. 271–286, 1 pl., May, 1925.

2227. Geology in open forum: Pan-Am. Geologist, vol. 44, no. 3, pp. 199–206, October, 1925.

2228. Shakopee dolomite and its cone-domes: Pan-Am. Geologist, vol. 45, no. 1, pp. 29-48, February, 1926.

2229. Peter sandstone and its buttes: Pan-Am. Geologist, vol. 45, no. 3, pp. 211-224, April, 1926.

2230. Beloit formation and bentonite: Pan-Am. Geologist, vol. 45, no. 5, pp. 383–392, 1 pl., June, 1926; vol. 46, no. 1, pp. 11–24, 1 fig., August, 1926.

2231. 'Four-stage glacial epoch: Pan-Am. Geologist, vol. 46, no. 3, pp. 175–188, October, 1926.

2232. Pioneer repopulation of devastated sea bottoms: Pan-Am. Geologist, vol. 46, no. 4, pp. 273–288, November, 1926.

Sauer, Carl Ortwin.

2233. The morphology of landscape: California, Univ., Pub. in Geography, vol. 2, pp. 19–53, October 12, 1925.

Savage, Thomas Edmund.

2234. The correlation of the Maquoketa and Richmond rocks of Iowa and Illinois: Illinois State Acad. Sci., Trans., vol. 17, pp. 233-247, 1925.

2235. Comparison of the Devonian rocks of Illinois and Missouri: Jour. Geology, vol. 33, no. 5, pp. 550-558, July-August, 1925; abstract, Illinois State Acad. Sci., Trans., vol. 18, p. 408, 1925.

2236. Oriskany rocks in Illinois: Am. Jour. Sci., 5th ser., vol. 10, pp. 139–144, 2 figs., August, 1925.

2237. Silurian rocks of Illinois: Geol. Soc. America, Bull., vol. 37, no. 4, pp. 513-533, 1 fig., December 30, 1926; abstract, no. 1, pp. 159-160, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, p. 161, March, 1926; Illinois State Acad. Sci., Trans., vol. 19, pp. 286-287, 1926.

Sawtelle, George.

2238. The Batson oil field, Hardin County, Texas: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 9, pp. 1277–1282, 2 figs., 1 pl., December, 1925; Geology of salt dome oil fields, pp. 524–529, 1 pl., 1926.

Sayles, Robert Wilcox. See also Twenhofel, 2599.

2239. Report on the geological collections: Harvard Coll., Mus. Comp. Zoology, Ann. Rept. Director, 1924-5, p. 23, 1925.

2240. (and Clark, Thomas H.). Pleistocene Bermuda (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, pp. 141-142, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, pp. 145-146, March, 1925.

Sayles, Robert Wilcox-Continued.

2241. Superficial factors in earthquakes; Science, new ser., vol. 62, pp. 299-301, October 2, 1925; Royal Astronomical Soc. Canada, Jour., vol. 19, no. 6, pp. 179-182, October, 1925.

2242. Report on the geological collections: Harvard Coll., Mus. Comp. Zoology, Ann. Rept. Director, 1925-6, p. 23, 1926.

2243. George Carroll Curtis: Geog. Rev., vol. 16, no. 2, pp. 332-333, April, 1926.

Schagen van Soelen, J. C.

2244. Angular inclusions and banded and "orbicular" structure in ore veins: Eng. and Min. Jour., vol. 122, no. 20, pp. 777-778, 1 fig., November 13, 1926. (4 of grant lines and grant lines are grant lines and grant lines and grant lines are grant lines ar

Schairer, J. F.

2245. (and Lawson, C. C.) On pickeringite from Portland, Connecticut: Am. Jour. Sci., 5th ser., vol. 11, pp. 301-304, 1 fig., April, 1926.

2246. Lithiophilite and other rare phosphates from Portland, Connecticut: Am. Mineralogist, vol. 11, no. 4, pp. 101-104, April, 1926.

Schaller, Waldemar Theodore. See also Hewett, 1102; Larsen, 1539, 1544.

2247. The genesis of lithium pegmatites: Am. Jour. Sci., 5th ser., vol. 10, pp. 269-279, 1 fig., September, 1925.

2248. Index of refraction of hisingerite—a correction: Am. Jour. Sci., 5th ser., vol. 11, p. 376, April, 1926.

2249. (and Henderson, Edward P.). Purple muscovite from New Mexico: Am. Mineralogist, vol. 11, no. 1, pp. 5-16, January, 1926.

2250. How pegmatites form (abstract): Am. Mineralogist, vol. 11, no. 2, pp. 41-42, February, 1926.

2251. Genesis of lithium pegmatites (abstract): Washington Acad. Sci., Jour., vol. 16, no. 3, p. 76, February 4, 1926.

Schenck, Hubert Gregory. See also Kerr, 1404.

2252. Physiography of the Eugene quadrangle, Oregon (abstract with discussion by Warren D. Smith): Geol. Soc. America, Bull., vol. 36, no. 1, p. 203, March 30, 1925.

2253. (and Aguerrevere, Santiago E.). Morphologic nomenclature of orbitoidal Foraminifera: Am. Jour. Sci., 5th ser., vol. 11, pp. 251-256, 3 figs., March, 1926.

2254. Cassididae of western America: California, Univ., Dept. Geol. Sci., Bull., vol. 16, no. 4, pp. 69-98, 1 fig., 4 pls., May 4, 1926.

2255. Should new fossil species be described from wells?: Science, new ser., vol. 64, pp. 65-66, July 16, 1926.

Scheuble, Hugo. See Müllerried, 1869.

Schneider, H. G.

2256. Names of producing sands in the Smackover, Arkansas, field: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 7, pp. 1116-1117, October, 1925.

Schneider, Hyrum.

2257. A discussion of certain geologic features of the Wasatch Mountains: Jour. Geology, vol. 33, no. 1, pp. 28-48, 5 figs., January-February, 1925.

Schofield, Stuart James.

2258. The fissure systems of British Columbia: Canadian Inst. Min. and Met., Bull., no. 159, pp. 759-764, 1 fig., July, 1925; Trans., vol. 28, pp. 428-433, 1 fig. [1926].

2259. The Britannia mines, British Columbia: Econ. Geology, vol. 21, no. 3, pp. 271-284, 3 figs., May, 1926.

Schrader, Frank Charles.

2260. Antimony in 1923: U. S. Geol. Survey, Mineral Resources, 1923, pt. 1, pp. 277-293, 2 figs., January 21, 1925.

2261. Antimony in 1924: U. S., Bur. Mines, Mineral Resources, 1924, pt. 1, pp. 105-118, 1 fig., March 13, 1926.

2262. (and Ross, Clyde P.). Antimony and quicksilver deposits in the Yellow Pine district, Idaho: U. S. Geol. Survey, Bull. 780, pp. 137-164, 4 figs., 2 pls. (incl. map), March 12, 1926.

Schuchert, Charles. See also Pirsson, 2006; Spieker, 2395.

2263. The paleogeography of Permian time in relation to the geography of earlier and later periods: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 2, pp. 1079–1091, 6 figs. (paleogeographic maps) [1924].

2264. Significance of Taconic orogeny: Geol. Soc. America, Bull., vol. 36, no. 2, pp. 343-350, June 30, 1925.

2265. John Mason Clarke, 1857–1925: Am. Jour. Sci., 5th ser., vol. 10, p. 92, July, 1925.

2266. (and Ruedemann, Rudolf). John Mason Clarke (1857–1925): Science, new ser., vol. 62, pp. 117–121, August 7, 1925.

2267. (and Dart, J. Doris). Stratigraphy of the Port Daniel-Gascons area of southeastern Quebec: Canada, Geol. Survey, Bull. no. 44, pp. 35-58, 4 pls. (incl. map), 1926.

2268. Memorial of John Mason Clarke: Geol. Soc. America, Bull., vol. 37, no. 1, pp. 49-93, 1 pl. (portr.), March 30, 1926.

2269. Stille's analysis and synthesis of the mountain structures of the earth:

Am. Jour. Sci., 5th ser., vol. 12, pp. 277–292, 2 figs., October, 1926.

Schwartz, George Melvin.

2270. Xonotlite and pectolite in a diabase pegmatite from Minnesota: Am. Mineralogist, vol. 10, no. 4, pp. 83–88, 2 figs., April, 1925.

2271. A sulphide diabase from Cook County, Minnesota: Econ. Geology, vol. 20, no. 3, pp. 261–265, 1 pl., May, 1925.

2272. Geology of the Etta spodumene mine, Black Hills, South Dakota: Econ. Geology, vol. 20, no. 7, pp. 646-659, 2 figs., November, 1925.

2273. Geode concretions from the Black Hills, South Dakota: Am. Mineralogist, vol. 11, no. 2, pp. 30-33, 1 fig., February, 1926.

2274. (and Leonard, R. J.) Alteration of spodumene in the Etta mine, Black Hills, South Dakota: Am. Jour. Sci., 5th ser., vol. 11, pp. 257-264, 2 figs., March, 1926.

2275. Contact action of pegmatite on schist (abstract); Geol. Soc. America, Bull., vol. 37, no. 1, p. 150, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, p. 158, March, 1926.

Schwerin, Martin.

2276. The Illinois-Kentucky fluorspar district: Eng. and Min. Jour., vol. 122, no. 16, p. 623, October 16, 1926.

Scott, Flora Murray.

2277. Notes on the flora of the Miocene of the Tesla region, California: Torrey Bot. Club, Bull., vol. 53, no. 6, pp. 403-410, 1 pl., June,

Scott. Gavle.

2278. Études stratigraphiques et paléontologiques sur les terrains crétacés du Texas. Thesis, Université de Grenoble, 218 pp., 1 fig., 3 pls., Grenoble, 1926; Grenoble, Univ., Annales, n. s., sec. sci., t. 3, pp. 93-210 (1926).

2279. The Woodbine sand of Texas interpreted as a regressive phenomenon: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 6, pp. 613-634, 2 figs., 1 pl., June, 1926.

2280. On a new correlation of the Texas Cretaceous: Am. Jour. Sci., 5th ser., vol. 12, pp. 157-161, August, 1926.

Scott, William Berryman.

2281. Geological climates: Geol. Soc. America, Bull., vol. 37, no. 1, pp. 261-278, March 30, 1926.

Searight, Walter V.

2282. Global distribution of Fusulina (abstract): Pan-Am. Geologist, vol. 46, no. 5, p. 406, December, 1926.

Sears, Julian Ducker.

2283. Geology and coal resources of the Gallup-Zuni Basin, New Mexico: U. S. Geol. Survey, Bull. 767, 52 pp., 4 figs., 17 pls. (incl. maps), 1925.

2284. Geology of the Baxter Basin gas field, Sweetwater County, Wyoming: U. S. Geol, Survey, Bull. 781, pp. 13-27, 1 fig., 5 pls. (incl. map), February 4, 1926.

Seashore, Paul T. See DeWolf, 649.

Seashore, Robert H.

2285. The geology of the region about Belton in northwestern Montana (abstract): Iowa Acad. Sci., Proc., vol. 31, pp. 334-335 [1926?].

Sellards, Elias Howard. See also Pratt, 2020.

2286. (and Patton, Leroy T.) The subsurface geology of the Big Lake oil field: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 4, pp. 365–381, 9 figs., April, 1926.

2287. Color printing of geological maps: Canada, Geol. Survey, Bull. no. 44, 4 pp., 4 pls., March 14, 1925.

Service, Jerry H.

2288. Seismic wave velocity and densities of crustal materials: Science, new ser., vol. 63, pp. 616-617, June 18, 1926.

Seward, Albert Charles.

2289. The Cretaceous plant-bearing rocks of western Greenland: Roy. Soc. London, Philos. Trans., ser. B, vol. 215, pp. 57-175, 37 figs., 9 pls., August 9, 1926.

Seyler, Clarence A.

2290. The microstructure of coal: Am. Inst. Min. and Met. Eng., Trans., vol. 71, pp. 117-126, 18 figs., 1925; [preprint], no. 1428, 10 pp., 18 figs., March, 1925; abstract, Mining and Metallurgy, vol. 6, no. 227, p. 571, November, 1925.

Shannon, Charles William.

- 2291. Physiographic features and surface elevations [of Oklahoma]: Bureau Monthly, published by Bureau of Geology, Norman, Okla., vol. 1, no. 1, pp. 6-9, 1 fig. (map), April, 1925.
- 2292. (and others). Coal in Oklahoma (revised and edited by C. L. Cooper):
 Oklahoma Geol. Survey, Bull. no. 4, 110 pp., 12 figs., 23 pls. (incl. maps), July, 1926.
- Shannon, Earl Victor. See also Gillson, 897; Hovey, 1179; Ross, 2157, 2158, 2160, 2161, 2162, 2166.
 - 2293. An occurrence of xonotlite at Leesburg, Virginia: Am. Mineralogist, vol. 10, no. 1, pp. 12–13, January, 1925.
 - 2294. A re-examination of beaumontite from Baltimore [Maryland]: Am. Mineralogist, vol. 10, no. 2, pp. 31–34, February, 1925.
 - 2295. (and Larsen, Esper S.). Merrillite and chloraptite from stony meteorites: Am. Jour. Sci., 5th ser., vol. 9, pp. 250-260, March, 1925.
 - 2296. Boulangerite from the Cleveland mine, Stevens County, Washington: Washington Acad. Sci., Jour., vol. 15, no. 9, pp. 195–197, May 4, 1925.
 - 2297. Mineralogy and petrography of Triassic limestone conglomerate metamorphosed by intrusive diabase at Leesburg, Virginia: U. S. Nat. Mus., Proc., vol. 66, art. 28, 31 pp., 8 figs., 3 pls., May 22, 1925.*
 - 2298. The so-called halloysite of Jones Falls, Maryland: Am. Mineralogist, vol. 10, no. 7, pp. 159-161, July, 1925.
 - 2299. Jamesonite from Slate Creek, Custer County, Idaho: Am. Mineralogist, vol. 10, no. 8, pp. 194–197, August, 1925.
 - 2300. Tetradymite from the Hailey quadrangle, Idaho: Am. Mineralogist, vol. 10, no. 8, pp. 198–199, August, 1925.
 - 2301. Petzite from the Last Chance mine, Cornucopia district, Oregon: Washington Acad. Sci., Jour., vol. 15, no. 14, pp. 342-344, August 19, 1925.
 - 2302. Magnesite and kammerite from Low's mine (Line Pit), Cecil County, Maryland: Washington Acad. Sci., Jour., vol. 15, no. 19, pp. 434-438, November 19, 1925.
 - 2303. The minerals of Idaho: U. S. Nat. Mus., Bull. 131, 483 pp., 170 figs., 19 pls., 1926.
 - 2304. Mineralogy of the chrome ore from Etchison, Montgomery County,
 Maryland: Am. Mineralogist, vol. 11, no. 1, pp. 16-20, January,
 1926.
 - 2305. (and Larsen, Esper S.). A peculiar manganiferous serpentine from Franklin Furnace [New Jersey]: Am. Mineralogist, vol. 11, no. 2, pp. 28-30, February, 1926.
- 2306. Some minerals from the Kensington mica mine, Montgomery County, Maryland: Am. Mineralogist, vol. 11, no. 2, pp. 35-37, February, 1926.
- 2307. (and Berman, H.). Barysilite from Franklin Furnace, New Jersey:
 Am. Mineralogist, vol. 11, no. 5, pp. 130-132, May, 1926.
- 2308. The identity of carrolite with linnaeite: Am. Jour. Sci., 5th ser., vol. 11, pp. 489-493, June, 1926.

Shaw, H.

2309. New method of radio-aeronautic prospecting: Econ. Geology, vol. 20, no. 4, pp. 391-395, June-July, 1925.

Shedd, Solon.

2310. Washington Geological Survey [activities]: Pan-Am. Geologist, vol. 44, no. 4, pp. 326-327, November, 1925.

Sheldon, Pearl.

2311. Significant characteristics of glacial erosion as illustrated by an erosion channel: Jour. Geology, vol. 34, no. 3, pp. 257-265, 2 figs., April-May, 1926. Shepard, Francis Parker.

2312. Lantern slide examinations in geology: Illinois State Acad. Sci., Trans., vol. 18, pp. 414-417, 1 fig., 3 pls., 1925.

2313. Some transverse faults along the Rocky Mountain trench (abstract): Geol. Soc. America. Bull., vol. 36, no. 1, p. 156, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, pp. 151-152, March, 1925.

2314. Further investigations of the Rocky Mountain trench [British Columbia]: Jour. Geology, vol. 34, no. 7, pp. 623-641, 13 figs. (incl. map), October-November, 1926.

Shepherd, Ernest Stanley.

2315. The analysis of gases obtained from volcanoes and from rocks: Jour. Geology, vol. 33, no. 3, suppl., pp. 289-370, 28 figs., April-May,

2316. Note on the chemical significance of engulfment at Kilauea (with discussion): Washington Acad. Sci., Jour., vol. 15, no. 18, November 4, 1925; Bull. volcanologique, 2e ann., nos. 5-6, pp. 328-332, 1925.

Shimer, Hervey Woodburn,

2317. An introduction to earth history. vili, 411 pp., 141 figs., Boston, Ginn and Company, c. 1925.

2318. Memorial of Frederick Burritt Peck: Geol. Soc. America, Bull., vol. 37, no. 1, pp. 111-114, 1 pl. (portr.), March 30, 1926.

2319. Upper Paleozoic faunas of the Lake Minnewanka section, near Banff, Alberta: Canada, Geol. Survey, Bull. no. 42, pp. 1-84, 1 fig. 8 pls., May 8, 1926.

2320. A Triassic coral reef fauna in British Columbia: Canada, Geol. Survey, Bull. no. 42, pp. 85-89, May 8, 1926.

Short, M. N. See also Capps, 403.

2321. (and Ettlinger, I. A.). Ore deposition and enrichment at the Magma mine, Superior, Arizona: Am. Inst. Min. and Met. Eng., Trans. [preprint], no. 1552, 54 pp., 29 figs. (incl. map), February, 1926; (with discussion), Trans. vol. 74, pp. 174-222, 29 figs. (incl. map), 1926; abstract, Mining and Metallurgy, vol. 7, no. 232, pp. 175-176, 1 fig., April, 1926.

2322. The preparation of polished sections of ores: Econ. Geology, vol. 21, no. 7, pp. 648-664, 2 figs., 1926.

2323 (and Henderson, E. P.). Tetradymite from Hachita, New Mexico: Am. Mineralogist, vol. 11, no. 11, pp. 316-317, November, 1926.

Short, R. T. See Bybee, 368.

Siebenthal, Claude Ellsworth.

2324. (and Stoll, A.). Cadmium in 1923-1924: U. S. Geol. Survey, Mineral Resources, 1924, pt. 1, pp. 7-11, 1925.

2325. Balance sheets for mine and smelter production of domestic copper, lead, and zinc: Econ. Geology, vol. 20, no. 1, pp. 83-96, January-February, 1925.

2326. Contour map of the surface of the beds underlying the Cherokee shale in a portion of the Picher district, Oklahoma, showing relations of ore bodies to the surface contoured: [U. S. Geol. Survey], 4 pp. [mimeographed] and map, April 20, 1925.

2327. (and Stoll, A.). Zinc in 1924 (smelter report): U. S., Bur. Mines, Mineral Resources U. S., 1924, pt. 1, pp. 235–254, 2 figs., April 13, 1926.

Simons, F. L. See Fisher, 808.

Simpson, George Gaylord.

2328. Mesozoic Mammalia, I; American triconodonts: Am. Jour. Sci., 5th ser., vol. 10, pp. 145-165, 334-358, 21 figs., August and October, 1925; abstract, Geol. Soc. America, Bull., vol. 36, no. 1, p. 229, March 30, 1925.

2329. Mesozoic Mammalia, II; Tinodon and its allies: Am. Jour. Sci., 5th ser., vol. 10, pp. 451–470, 9 figs., November, 1925.

2330. Mesozoic Mammalia, III; Preliminary comparison of Jurassic mammals except multituberculates: Am. Jour. Sci., 5th ser., vol. 10, pp. 559–569, 3 figs., December, 1925.

2331. Mesozoic Mammalia, IV; The multituberculates as living animals: Am. Jour. Sci., 5th ser., vol. 11, pp. 228–250, 8 figs., March, 1926.

2332. Mesozoic Mammalia, V; Dromatherium and Microconodon: Am. Jour. Sci., 5th ser., vol. 12, pp. 87–108, 4 figs., August, 1926.

2333. Reconnaissance of part of the Santa Fe formation (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 230, March 30, 1925.

2334. The age of the Morrison formation: Am. Jour. Sci., 5th ser., vol. 12, pp.198-216, September, 1926.

2335. New reconstruction of Lasanius (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 237, March 30, 1926.

2336. Pre-Cretaceous evolution of mammalian lower molars (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 238, March 30, 1926.

2337. Are *Dromatherium* and *Microconodon* mammals? [from Triassic of North Carolina]: Science, new ser., vol. 63, pp. 548-549, May 28, 1926

2338. The fauna of Quarry 9 [Morrison formation, Como Bluff, Wyoming]:

Am. Jour. Sci., 5th ser., vol. 12, pp. 1-11, 1 fig., July, 1926.

2339. American terrestrial Rhynchocephalia: Am. Jour. Sci., 5th ser., vol. 12, pp. 12–16, 2 figs., July, 1926.

Simpson, Howard Edwin,

2340. The principles of conservation as applied to artesian waters [North Dakota]: North Dakota, Univ., Quart. Jour., vol. 15, no. 4, pp. 287–297, May, 1925.

2341. The badlands of the Little Missouri [North Dakota]: North Dakota, Univ., Quart. Jour., vol. 16, no. 2, p. 148, 4 pls., January, 1926.

Sinclair, E. G.

2342. Oil possibilities of the Black Hills region: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 8, pp. 800-809, August, 1926.

Sinclair, William John.

2343. The mounted skeleton of a new Mesohippus from the Protoceras beds: Am. Philos. Soc., Proc., vol. 64, no. 1, pp. 55-63, 1 pl., 1925.

Sine, F. L.

2344. Antozonite from Monteagle Township, Hastings County, Ontario: Toronto, Univ., Studies, Geol. ser., no. 20, pp. 22-24, 1925.

2345. Fetid feldspar from Loughboro Township, Frontenac County, Ontario: Toronto, Univ., Studies, Geol. ser., no. 20, pp. 25–27, 1925.

2346. The pegmatite dikes of southeastern Ontario: Canadian Min. Jour., vol. 47, no. 7, pp. 169–171, February 12, no. 10, pp. 237–243, 2 figs., March 5, no. 11, pp. 257–262, 1 fig., March 12, 1926.

Singewald, Joseph Theophilus. See Lindgren, 1588.

Sisler, James Donaldson.

2347. Geology of Pennsylvania bituminous coals: Pennsylvania Geol. Survey, 4th ser., Bu'l. M6, pt. 4, pp. 2-6, 1925.

Slate, Frederick.

2348. Biographical memoir of Eugene Woldemar Hilgard, 1833–1916: Nat. Acad. Sci., Biog. Mem., vol. 9, pp. 95–155, portr., November, 1919.

Slavik, F.

2349. Note on zaratite from Bohemia, Pennsylvania, and Tasmania: Am. Mineralogist, vol. 11, no. 10, pp. 279-280, October, 1926.

Slawson, Chester B.

2350. The thermo-optical properties of heulandite: Am. Mineralogist, vol. 10, no. 9, pp. 305-331, 4 figs., 3 pls., September, 1925.

Smith, Edward S. C. See also Perkins, 1991.

2351. Contributions to the geology of Maine, No. 2; Part II, The igneous rock of Mt. Kineo and vicinity: Am. Jour. Sci., 5th ser., vol. 10, pp. 437-444, 1 fig., November, 1925.

Smith, Eugene Allen.

2352. (and others). Geologic map of Alabama ... Scale, 1:500,000. Alabama Geol. Survey, 1926. Accompanies Special report no. 14.

2353. Report of progress for the fiscal years 1923-1926: Alabama Geol. Survey, 16 pp., 1926.

Smith, George Otis.

2354. Alfred Hulse Brooks: Science, new ser., vol. 61, pp. 80–81, January 23, 1925.

2355. Alfred Hulse Brooks: Mining and Metallurgy, vol. 6, no. 218, pp. 98-99, February, 1925.

2356. Topographic and geologic maps: Military Engineer, vol. 17, no. 95, pp. 381–395, 19 figs., 8 pls., September-October, 1925.

2357. Forty-sixth annual report of the Director of the Geological Survey to the Secretary of the Interior for the fiscal year ended June 30, 1925. 91 pp., 1 pl. (map), Washington, 1925.

2358. Forty-seventh annual report of the Director of the Geological Survey to the Secretary of the Interior for the fiscal year ended June 30, 1926. 96 pp., Washington, 1926.

Smith, John Eliphalet.

2359. The fertilizer materials of Iowa: Iowa Geol. Survey, vol. 31, pp. 91–151, 13 figs., 7 pls., (incl. maps) [1926?].

2360. Some theoretical stages in the retreat of the Iowan ice sheets (abstract): Iowa. Acad. Sci., Proc., vol. 31, p. 335 [1926?]

Smith, John Eliphalet-Continued.

- 2361. The Algona recessional stages of the Wisconsin glaciation in Iowa (abstract): Iowa Acad. Sci., Proc., vol. 31, pp. 335–337, 1 fig. [1926?].
- 2362. A preliminary map of the Wisconsin till in Iowa (abstract): Iowa Acad. Sci., Proc., vol. 31, pp. 337–338 [1926?].
- 2363. The Humboldt stages of the Wisconsin glaciation in Iowa (abstract):
 Iowa Acad. Sci., Proc., vol. 31, pp. 338-339 [1926?].
- 2364. The Algona recessional stages of the Wisconsin till in Iowa (abstract):

 Iowa Acad. Sci., Proc., vol. 31, p. 339 [1926?].
- 2365. Molding sand in eastern Iowa (abstract): Iowa Acad. Sci., Proc., 1925, vol. 32, pp. 357–358 [1926].
- 2366. Glacial geology of Story County (abstract): Iowa Acad. Sci., Proc., 1925, vol. 32, pp. 358-359 [1926].

Smith, Philip Sidney.

- 2367. Notes on activities of the Geological Survey of United States of America: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 2, pp. 1296–1303 [1924].
- 2368. Alfred Hulse Brooks: Assoc. Am. Geographers, Annals, vol. 15, no. 4, pp. 159-161, December, 1925.
- 2369. Mineral industry of Alaska in 1924 and administrative report: U. S. Geol. Survey, Bull. 783, pp. 1-39, 1926.
- 2370. (and Mertie, J. B., jr., and Foran, W. T.). Summary of recent surveys in northern Alaska: U. S. Geol. Survey, Bull. 783, pp. 151-166, 1 fig., 1 pl. (map), 1926.
- 2371. Fields for future Alaskan studies (abstract): Washington Acad. Sci., Jour., vol. 16, no. 3, p. 79, February 4, 1926.
- 2372. Memorial of Alfred Hulse Brooks: Geol. Soc. America, Bull., vol. 37, no. 1, pp. 15-48, 1 pl. (portr.), March 30, 1926.
- 2373. Oil developments in Alaska: Am. Inst. Min. and Met. Eng., no. 1570 (Petroleum development and technology in 1925), pp. 653-656, April, 1926; abstract, Mining and Metallurgy, vol. 7, no. 232, p. 177, April, 1926.

Smith, Richard A.

2374. Mineral resources of Michigan, with statistical tables of production and value of mineral products for 1923 and prior years: Michigan. Geol. Survey, Pub. 35 (Geol. ser. 29), 115 pp. [n. d., 1925?].

Smith, Richard W.

2375. Geology and utilization of Tennessee phosphate rock: Am. Inst. Min. and Met. Eng., Trans., vol. 74, pp. 127–146, 5 figs., 1926; [preprint] no. 1373, September, 1924.

Smith, Walter R.

- 2376. Aniakchak Crater, Alaska Peninsula: U. S. Geol. Survey, Prof. Paper 132, pp. 139–145, 1 fig., 4 pls., May 15, 1925.
- 2377. The Cold Bay-Katmai district [Alaska]; U. S. Geol. Survey, Bull. 773, pp. 183–207, map, 1925.
- 2378. Geology and oil development of the Cold Bay district: U. S. Geol. Survey, Bull. 783, pp. 63–88, 1 fig., 1 pl. (map), 1926.

Smith, Warren Du Pré. See also Macelwane, 1662; Schenck, 2252; Takahashi, 2498.

2379. Geology of Steens and Pueblo Mountains, southeastern Oregon (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 202, March 30, 1925.

2380. Physical and economic geography of Oregon; the Willamette Valley:
Oregon, Univ., Commonwealth Review, vol. 7, no. 4, pp. 137-194,
15 figs., 2 pls., October, 1925.

2381. Physical and economic geology of Oregon; the southeastern lake province: Oregon, Univ., Commonwealth Review, vol. 8, nos. 2 and 3,

pp. 199-253, 5 figs., 2 pls., April-July, 1926.

2382. Physical and economic geography of Oregon; the Coast Range province: Oregon, Univ., Commonwealth Review, vol. 8, nos. 2–3, pp. 254–297, 15 figs., 3 pls., April–July, 1926.

Smith, William Sidney Tangier.

2383. An apparent-dip protractor: Econ. Geology, vol. 20, no. 2, pp. 181–184, 1 fig., March-April, 1925; abstract, Geol. Soc. America, Bull., vol. 36, no. 1, p. 206, March 30, 1925.

Smithsonian Institution.

2384. Explorations and field work of the Smithsonian Institution in 1924: Smithsonian Misc. Coll., vol. 77, no. 2, 136 pp., 138 figs., 1925.

2385. Explorations and field work of the Smithsonian Institution in 1925: Smithsonian Misc. Coll., vol. 78, no. 1, 132 pp., 128 figs., 1926.

Smyth, Charles Henry.

2386. (and Buddington, A. F.). Geology of the Lake Bonaparte quadrangle: New York State Mus. Bull., no. 269, 106 pp., 24 pls., map, 1926.

Snow, D. R.

2387. (and Dean, David). Rainbow Bend field, Cowley County, Kansas:
Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 6, pp. 974–982,
2 figs., September, 1925.

Snow, F. W. See Browning, 309.

Sosman, Robert Browning. See also Bowie, 249.

2388. Section of volcanology, summary of reports of committees: Nat. Research Council, Bull., vol. 10, pt. 3, no. 53, p. 80, July, 1925.

2389. (and Posnjak, E.). Ferromagnetic ferric oxide, artificial and natural: Washington Acad. Sci., Jour., vol. 15, no. 14, pp. 329-342, 3 figs., August 19, 1925.

2390. Scientific papers and discussions at the 1925 meeting of the section of volcanology, American Geophysical Union: Washington Acad. Sci., Jour., vol. 15, no. 18, pp. 413–425; November 4, 1925.

2391. Oxygen and volcanism (abstract with discussion): Washington Acad. Sci., Jour., vol. 15, no. 18, pp. 422-423, November 4, 1925; Bull.

volcanologique, 2e ann., nos. 5-6, pp. 334-335, 1925.

2392. Seismic waves and what we learn from them as to the interior of the earth: Nat. Research Council, Bull., vol. 11, pt. 2, no. 56, pp. 26–28, November, 1926; abstract, Am. Jour. Sci., 5th ser., vol. 12, pp. 271–272, September, 1926.

Spencer, Arthur Coe.

2393. Metasomatism and linear "force of growing crystals" (discussion): Econ. Geology, vol. 21, no. 5, pp. 504-507, August, 1926.

Spieker, Edmund Maute.

2394. Geology of the coal fields [of Utah]: U. S., Bur. Mines, Tech. Paper 345, pp. 13-22, 1 fig., 1925.

2395. (and Reeside, John B., jr.). Cretaceous and Tertiary formations of the Wasatch Plateau, Utah (with discussion by Charles Schuchert): Geol. Soc. America, Bull., vol. 36, no. 3, pp. 435-454, 3 figs., September 30, 1925; abstract, no. 1, pp. 150-151, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, p. 149, March, 1925.

2396. Post-Cretaceous orogeny in central Utah (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 166, March 30, 1926; Pan-Am. Geologist,

vol. 45, no. 2, p. 165, March, 1926.

2397. (and Reeside, John B., jr.). Upper Cretaceous shore line in Utah: Geol. Soc. America, Bull., vol. 37, no. 3, pp. 429-438, 3 figs., September 30, 1926; abstract, no. 1, p. 160, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, p. 161, March, 1926.

Spooner, W. C.

2398. The Monroe gas field; geology: Louisiana, Dept. Conservation, Bull. no. 12, pp. 4-6, 1 pl. [1926].

2399. Interior salt domes of Louisiana: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 3, pp. 217-292, 25 figs., 1 pl., March, 1926; Geology of salt dome oil fields, pp. 269-344, 25 figs., 1 pl., 1926.

Spoor, H. C., jr.

2400. Current oil field operations in Illinois: Illinois State Geol. Survey,
Press Bull. Ser., Illinois Petroleum, no. 5, pp. 18-24, October 16,
1926.

Springer, Frank.

2401. Occurrence of the crinoid genus Apiocrinus in America: U. S. Nat. Mus., Proc., vol. 67, art. 18, 5 pp., 1 pl., April 8, 1925.

2402. The genus *Pentacrinus* in Alaska: U. S. Nat. Mus., Proc., vol. 67, art. 5, 7 pp., 1 pl., May 22, 1925.

2403. American Silurian crinoids: Smithsonian Inst., 239 pp., 33 pls., 1926.

2404. Unusual forms of fossil crinoids: U. S. Nat. Mus., Proc., vol. 67, art. 9, 137 pp., 26 pls., February 15, 1926.

2405. Upper Devonian crinoids from Mackenzie River valley: Canada, Geol. Survey, Bull. no. 42, pp. 127–132, 1 pl., May 8, 1926.

Spurr, Josiah Edward. See also Engineering and Mining Journal-Press; Hulin, 1202; Lindgren, 1588.

2406. (and Lewis, J. Volney). Ore deposition at Franklin Furnace, New Jersey: Eng. and Min. Jour.-Press, vol. 119, no. 8, pp. 317–328, 21 figs., February 21, 1925.

2407. The Camp Bird [Colorado] compound veinake: Econ. Geology, vol. 20, no. 2, pp. 115–152, 10 figs., March-April, 1925; Eng. and Min. Jour.-Press, vol. 119, no. 13, pp. 517–529, 12 figs., March 28, 1925.

2408. Ore magmas versus magmatic waters: Eng. and Min. Jour.-Press, vol. 119, no. 22, p. 890, May 30, 1925.

2409. Basic dike injections in magmatic vein sequences (with discussion by J. F. Kemp): Geol. Soc. America, Bull., vol. 36, no. 3, pp. 545–582, 4 figs., September 30, 1925; abstract, no. 1, p. 167, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, p. 145, March, 1927.

2410. What is a magma?: Eng. and Min. Jour.-Press, vol. 120, no. 15, p. 562, October 10, 1925.

Spurr. Josiah Edward-Continued,

2411. Angular inclusions in ore deposits (discussion): Econ. Geology, vol. 20, no. 8, pp. 766-767, December, 1925.

2412. Alkaline sulphides as collectors of metals: Eng. and Min. Jour.-Press, vol. 120, no. 25, pp. 975-977, December 19, 1925; Bol. minero, t. 21, no. 1, pp. 12-16, January, 1926.

2413. Geology applied to mining; a first book of general geology and metallology. 361 pp., 124 figs., New York, McGraw-Hill Book Company, 1926.

2414. Formation of Porcupine quartz veins (discussion): Econ. Geology, vol. 21, no. 1, pp. 95-96, January-February, 1926.

2415. Magmas, dikes, and veins: Eng. and Min. Jour., vol. 122, no. 4, pp. 134-140, July 24, 1926.

2416. Lead-zinc chimneys in limestone: Eng. and Min. Jour., vol. 122, no. 8, pp. 296-298, August 21, 1926.

2417. Successive banding around rock fragments in veins: Econ. Geology, vol. 21, no. 6, pp. 519-537, 16 figs., September, 1926; Eng. and Min. Jour., vol. 122, no. 13, pp. 491-498, 18 figs., September 25, 1926.

2418. Crystallization temperature of veins near the surface (discussion): Econ. Geology, vol. 21, no. 6, pp. 619-621, September, 1926.

2419. The Kentucky-Illinois ore magmatic district: Eng. and Min. Jour., vol. 122, no. 18, pp. 695-699, no. 19, pp. 731-738, 13 figs., October 30 and November 6, 1926.

2420. The southeast Missouri ore magmatic district; Eng. and Min. Jour., vol. 122, no. 25, pp. 968-975, 8 figs., December 18, 1926.

Stadnichenko, Taisia. See also White, 2985.

2421. (and White, David). Microthermal observations on some carbonaceous rocks: Oil and Gas Jour., vol. 24, no. 46, p. 120, April 8, 1926.

2422. (and White, David). Microthermal observations of some oil shales and other carbonaceous rocks: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 9, pp. 860-876, September, 1926.

Stainbrook, M. A.

2423. (and Ladd, H. S.). The fauna of the State Quarry beds: Iowa Acad. Sci., Proc., vol. 31, pp. 353-366, 1 pl. [1926?].

Stansfield, Edgar.

2424. (and others). Analyses of Alberta coal: Alberta, Sci. and Indus. Research Council, Rept. no. 14, 63 pp., 20 figs., 1925.

2425, Chemical characters of okaite: Am. Jour. Sci., 5th ser., vol. 11, pp. 396-398, May, 1926.

Stanton, Timothy William.

WORLDAY DOLL SE. DD. SEE 2426. [Review of] The geology and invertebrate paleontology of the Comanchean and "Dakota" formations of Kansas, by W. H. Twenhofel: Am. Jour. Sci., 5th ser., vol. 9, pp. 340-341, April, 1925.

2427. Evidence of invertebrates on the question of climatic zones during Mesozoic time: Sci. Monthly, vol. 20, no. 5, pp. 459-463, May, 1925.

2428. Climatic zones of Mesozoic times (abstract): Pan-Am. Geologist, vol. 44, no. 1, pp. 70-71, August, 1925.

2429. Well log in northern Ziebach County; the fossil content: South Dakota Geol. and Nat. Hist. Survey, Circular 18, pp. 8-14, September, 1925. gentorio .. sig El .. sgl St. . Till-To .qq . b .ou .b .lov

Stanton, Timothy William-Continued.

2430. Two new faunas in the marine upper Triassic of Nevada (abstract): Science, new ser., vol. 63, p. 485, May 7, 1926.

Staub, Walther.

2431. Zur Kenntniss der Anordnung der Gebirgsketten in Ostmexiko: Geol. Rundschau, Bd. 16, H. 3, pp. 161-166, 1 fig., June 30, 1925.

2432. Der Unterbau des Erdölgebietes von nordost Mexiko: Zeitschr. prakt. Geologie, Jg. 34, H. 8, pp. 120–125, August, 1926.

Stauffer, Clinton Raymond.

2433. The Jordan sandstone [Minnesota]: Jour. Geology, vol. 33, no. 7, pp. 699-713, 1 fig., October-November, 1925.

2434. Mineralization of the Platteville-Decorah contact zone in the Twin City region: Geol. Soc. America, Bull., vol. 36, no. 4, pp. 615-622, December 30, 1925; abstract, no. 1, p. 169, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, pp. 158-159, March, 1925.

2435. Minnesota's oil and gas possibilities: Am. Assoc. Petroleum Geologists. Bull., vol. 10, no. 2, pp. 190–196, 1 fig. (map), February, 1926.

Stearns, Harold T.

2436. The 1924 eruption of the Hawaiian volcano: Sci. Am., vol. 132, pp. 242-243, 6 figs., April, 1925.

2437. (and Bryan, L. L.). Preliminary report on the geology and water resources of the Mud Lake Basin, Idaho: U. S. Geol. Survey. Water-Supply Paper 560, pp. 87-132, 2 figs., 2 pls. (maps), October 20, 1925.

2438. The explosive phase of Kilauea Volcano, Hawaii, in 1924: Bull. volcanologique, 2° ann., nos. 5–6, pp. 193–208, 13 pls., 1925; abstract, Zeitschr. Vulkanologie, Bd. 10, H. 1, pp. 46–47, September, 1926.

2439. Origin of the volcanoes of Mauna Loa and Kilauea (abstract): Geol-Soc. America, Bull., vol. 37, no. 1, pp. 150-151, March 30, 1926; Pan-Am, Geologist, vol. 45, no. 2, p. 158, March, 1926.

2440. Volcanism in the Mud Lake area, Idaho: Am. Jour. Sci., 5th ser., vol. 11, pp. 353-363, 7 figs., April, 1926.

2441. The Keaiwa or 1823 lava flow from Kilauea Volcano, Hawaii: Jour-Geology, vol. 34, no. 4, pp. 336-351, 7 figs., May-June, 1926.

2442. The great explosions of Kilauea Volcano in 1924 (abstract): Washington Acad. Sci., Jour., vol. 16, no. 18, pp. 502-503, November 3, 1926.

Steidtmann, Edward.

2443. Limestones and marls of Wisconsin: Wisconsin Geol. and Nat. Hist. Survey, Bull. no. 66, 208 pp., 19 figs., 6 pls. (incl. map), 1924.

2444. Faceted sandstone pebbles of the North River, Virginia: Jour. Geology. vol. 34, no. 8, pp. 836–839, 1 fig., November–December, 1926.

Steiger, George. See Twenhofel, 2599, 2603.

Steiner, George.

2445. Torsion-balance principles as applied by the original Eötvös torsion balance: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 12, pp. 1210–1226, 12 figs., December, 1926.

Stensiö, Erik Andersson.

2446. On the head of the macropetalichthyids, with certain remarks on the head of the other arthrodires: Field Mus. Nat. Hist., Geol. Ser., vol. 4, no. 4, pp. 87–197, 26 figs., 13 pls., October, 1925.

Stephenson, C. D.

2447. Observations on the Verden sandstone of southwestern Oklahoma; Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 3, pp. 626-631, 1 fig., formit alg May-June, 1925. Mt. lov Hall alse Joso . Mood aviati

Stephenson, Lloyd William.

2448. Geology of Alabama; The Mesozoic rocks; Alabama, Geol. Survey, Spec. Rept. no. 14, pp. 231-250, 15 pls., 1926.

2449. Major features in the geology of the Atlantic and Gulf Coastal Plain: Washington Acad. Sci., Jour., vol. 16, no. 17, pp. 460-480, 1 pl. (map), October 18, 1926.

Sternberg, Charles M.

2450. Integument of Chasmosaurus belli: Canadian Field-Naturalist, vol. 39, no. 5, pp. 108-110, 1 pl., May, 1925.

2451. A new species of Thespesius from the Lance formation of Saskatchewan: Canada, Geol. Survey, Bull. no. 44, pp. 73-84, 1 fig., 3 pls., 1926.

2452. Dinosaur tracks from the Edmonton formation of Alberta: Canada, Geol. Survey, Bull. no. 44, pp. 85-87, 1 fig., 1 pl., 1926.

2453. Notes on the Edmonton formation of Alberta: Canadian Field-Naturalist, vol. 40, no. 5, pp. 102-104, May, 1926.

434-440, 3 figs, May, 1920.

Stevens, Blamey. See Lindgren, 1588.

Stewart, Ralph B. See Clark, 442.

Stiles, E. See Hager, 1000.

Stillwell, Frank H.

2454. Origin of asbestos veins: Econ. Geology, vol. 20, no. 1, pp. 104-105, January-February, 1925.

Stipp, Thomas F.

2455. The relation of Foraminifera to the origin of California petroleum: California Acad. Sci., Proc., 4th ser., vol. 15, no. 9, pp. 263–268, April 26, 1926; Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 7, pp. 697–702, July, 1926.

Stock, Chester. See also Merriam, 1762, 1763, 1764, 1767.

2456. Mammalian forms occurring in association with marine invertebrates in western North America: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 1, pp. 880-881 [1924].

2457. Some mammalian forms common to the Pliocene of America and Asia: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 1, p. 881 [1924].

2458. Cenozoic gravigrade edentates of western North America, with special reference to the Pleistocene Megalonychinae and Mylodontidae of Rancho La Brea [California]. 206 pp., 120 figs., 47 pls., published by the Carnegie Institution of Washington [Pub. no. 331], Washington, January, 1925.

2459. Discovery of mammalian remains in Sespe beds near Santa Paula, California (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 201, March 30, 1925.

2460. Recent discovery of human remains in Los Angeles, California (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 201, March 30, 1925.

86012-28-11

Stock, Chester-Continued.

2461. (and Furlong, E. L.). New canid and rhinocerotid remains from the Ricardo Pliocene of the Mohave Desert, California: California, Univ., Dept. Geol. Sci., Bull., vol. 16, no. 2, pp. 43-60, 4 pls., March 16, 1926.

2462. Anchitheriine horses from Fish Lake valley region, Nevada: California, Univ., Dept. Geol. Sci., Bull., vol. 16, no. 3, pp. 61-68, 1 fig., 1 pl., April 10, 1926.

2463. [Report on paleontological research]: Carnegie Inst. Washington, Year Book no. 25, 1925-6, pp. 404-405, December, 1926.

Stockdale, Paris Buell.

2464. The stratigraphic significance of solution in rocks; Jour. Geology, vol. 34, no. 5, pp. 399-414, 7 figs., July-August, 1926.

Stockley, James. See Davis, 603.

Stockwell, C. H. See also Emmons, 741.

2465. Galena Hill, Mayo district, Yukon: Canada, Geol. Survey, Summ. Rept., 1925, pt. A, pp. 1–14, map, 1926.

Stone, John B.

2466. The products and structure of Kilauea: Bernice P. Bishop Mus., Bull. 33, 59 pp., 7 figs., 2 pls., 1926.

2467. The Keniwa flow of 1923, Hawaii; Am. Jour. Sci., 5th ser, vol. 11, pp. 434-440, 3 figs., May, 1926.

Stone, Ralph Walter.

2468. Black granite of northern Bucks County, Pennsylvania (abstract): Pennsylvania Acad. Sci., Proc., vol. 1, p. 63, 1926.

2469. Fossil ivory (abstract): Pennsylvania Acad. Sci., Proc., vol. 1, p. 81,

2470. Pennsylvania building stone (abstract): Pennsylvania Acad. Sci., Proc., vol. 1, p. 100, 1926.

Stose, George Willis. See also Jonas, 1307. 2471. Mineral resources of Adams County, Pennsylvania: Pennsylvania Geol. Survey, 4th ser., Bull. C 1, pt. 2, 64 pp., 1 fig., 11 pls. (incl. map),

2472. (and Jonas, Anna I.). Triassic sedimentary rocks and basaltic flow northwest of Lebanon, Pennsylvania (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, pp. 160-161, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, p. 154, March 30, 1925.

2473. (and Jonas, Anna I.). Triassic rocks northwest of Lebanon, Pennsylvania (abstract): Pan-Am. Geologist, vol. 43, no. 5, pp. 368-369. June, 1925. Towns of the state of the state

Stoyanow, A. A.

2474. Notes on recent stratigraphic work in Arizona; Am. Jour. Sci., 5th ser., vol. 12, pp. 311-324, 1 fig., October, 1926.

Strahorn, A. T.

2475. Geology at site of proposed diversion works [at Headgate Rock, near Parker, Arizona]. In Report by C. A. Engle, Proposed irrigation project, Colorado River Indian Reservation, pp. 15-17, Hearings before Committee on Irrigation of Arid Lands, House of Representatives, 67th Cong., 2d Sess., on H. R. 1149 . . ., 1922.

Stromborg, Oscar.

2476. Discussion of the question, "Where does petroleum come from?"; Oil Age, vol. 23, no. 1, pp. 59, 61, January, no. 2, pp. 41, 43, 4 figs., February, 1926.

Stryker, W. L. See also Twenhofel, 2601.

2477. Subsurface geology of Wilson County, Kansas: Am, Assoc. Petroleum Geologists, Bull., vol. 9, no. 8, pp. 1207-1214, 3 pls., November, 1925.

Stuckey, Jasper L. See also Drane, 671,

2478. The pyrophyllite deposits of the Deep River region of North Carolina: Econ. Geology, vol. 20, no. 5, pp. 442-463, 2 figs. (incl. map), 2 pls., August, 1925.

2479. Chloritoid from the Deep River region, North Carolina: Am. Mineralogist, vol. 11, no. 7, pp. 186-188, July, 1926.

Stull, Ray Thomas.

2480. (and Bole, G. A.). Beneficiation and utilization of Georgia clays: U. S. Bur. Mines, Bull. 252, 72 pp., 23 figs., 1926.

Suman, John R.

2481. The Saratoga oil field, Hardin County, Texas: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 2, pp. 263-285, 5 figs., March-April, 1925; Geology of salt dome oil fields, pp. 501-523, 5 figs., 1926.

Swanson, Clarence Otto.

2482. The genesis of the Texada Island magnetite deposits: Canada, Geol. Survey, Summ. Rept., 1924, pt. A, pp. 106-144, 5 figs., 1925.

Swanson, W. L.

2483. The mineral association of the wolframite deposits at Burnt Hill Brook, York County, New Brunswick: Toronto, Univ., Studies, Geol. ser. no. 20, pp. 28-32, 1925.

Swartz, Joel H.

2484. Brief notice of a new radioactive method of determining the age of the earth (abstract): Elisha Mitchell Sci. Soc., Jour., vol. 41, nos. 1-2, pp. 21-22, September, 1925.

2485. Brief notice of two new methods of stratigraphic correlation, with special reference to the Chattanooga black shale (abstract): Elisha Mitchell Sci. Soc., Jour., vol. 41, nos. 1-2, pp. 22-23, September, 1925.

2486. The Big Stone Gap shale of southwestern Virginia: Science, new ser., vol. 64, p. 226, September 3, 1926

2487. A self-correcting formula for the calculation of rock thickness (abstract): Elisha Mitchell Sci. Soc., Jour., vol. 42, nos. 1-2, pp. 11-12, October, 1926.

2488. The Chattanooga shale of southwestern Virginia (abstract): Elisha Mitchell Sci. Soc., Jour., vol. 42, nos. 1-2, p. 13, October, 1926.

2489. The age of the Big Stone Gap shale of southwestern Virginia: Am. Jour. Sci., 5th ser., vol. 12, pp. 512-531, 3 figs., December, 1926.

Swift, T. T.

2490. Date of channel trenching in the Southwest: Science, new ser., vol. 63, pp. 70-71, January 15, 1926.

Swinnerton, A. C.

2491. A method of estimating postglacial time: Science, new ser., vol. 62. p. 566, December 18, 1925.

Sykes, Godfrey.

2492. The delta and estuary of the Colorado River: Geog. Rev., vol. 16, no. 2, pp. 232-255, 16 figs., 1 pl. (map), April, 1926.

Taber, Stephen.

2493. The active fault zones of the Greater Antilles: International Geol. Cong., 13th Sess., Belgium, 1922, fasc. 2, pp. 731-736, 1 fig., 1925.

2494. Evidence on Basin range structure: Science, new ser., vol. 62, pp. 436-437, November 13, 1925.

2495. Metasomatism and the pressure of growing crystals (discussion); Econ. Geology, vol. 21, no. 7, pp. 717-727, 1 fig., November, 1926.

2496. The origin of veins: Eng. and Min. Jour., vol. 122, no. 22, pp. 858–859, November 27, 1926.

Taff, Joseph Alexander.

2497. (and Hanna, G. D.). Notes on the age and correlation of the Moreno shale [California]: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 8, pp. 812–814, August, 1926.

Takahashi, Jun-ichi.

2498. Diatom theory of origin of petroleum in California (abstract with discussion by Dallas Hanna, Warren D. Smith, and Robert Anderson): Geol. Soc. America, Bull., vol. 36, no. 1, pp. 206–207, March 30, 1925.

Taliaferro, Nicholas Lloyd. See Hudson, 1195.

Talmage, Sterling B. 11-501 og A og 4001 dest menne gerene

2499. The diagnostic value of color in polished sections: Econ. Geology, vol. 20, no. 2, pp. 168–180, 1 fig., March-April, 1925.

2500. Quantitative standards for hardness of the ore minerals: Econ. Geology, vol. 20, no. 6, pp. 531–553, September-October, 1925.

Tanner, Vasco Myron.

2501. Notes on the collection of fossil fishes contained in the University of
Utah, with the description of one new species: Utah, Univ., Bull.,
vol. 15, no. 6 (Geol. Bull.), 16 pp., 3 pls., May, 1925.

Tanton, Thomas Leslie,

2502. Evidence of liquid immiscibility in a silicate magma, Agate Point,
Ontario: Jour. Geology, vol. 33, no. 6, pp. 629-641, 4 figs., AugustSeptember, 1925.

2503. Recognition of the Coutchiching near Steeprock Lake, Ontario: Roy. Soc. Canada, Proc. and Trans., 3d ser., vol. 20, pt. 1, sec. 4, pp. 39-49, 4 figs., 1926.

2504. Eastern part of Matawin iron range, Thunder Bay district, Ontario: Canada, Geol. Survey, Summ Rept., 1924, pt. C., pp. 1–27, 1 fig., map, 1926.

Tarr, Ralph Stockton.

2505. (and von Engeln, O. D.). New physical geography. xii, 689 pp., 543 figs., 8 pls., New York, The Macmillan Company, 1926.

Tarr, Russell S.

2506. The red beds near the base of the Cherokee shales: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 2, pp. 350-351, March-April, 1925.

Tarr, William Arthur. See also Twenhofel, 2599, 2603.

2507. Is the Chalk a chemical deposit?: Geol. Mag., vol. 62, pp. 252-264, June, 1925.

2508. The origin of chert and flint: Univ. Missouri Studies, vol. 1, no. 2, 46 pp., 3 figs., 8 pls., April 1, 1926.

2509. Silicification of erosion surfaces (discussion): Econ. Geology, vol. 21, no. 5, pp. 511-513, August, 1926.

Taylor, Frank Bursley.

2510. Movement of continental masses under action of tidal forces: Pan-Am. Geologist, vol. 43, no. 1, pp. 15-50, 2 figs., 2 pls., February, 1925.

2511. Reconnaissance of the recessional moraines of the Finger Lakes region (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 142, March 30, 1925.

2512. Moraines of recession between Indiana and New England (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, pp. 172-173, March 30, 1925, all 1

2513. Relation of recessional moraines to Niagara Falls (abstract); Pan-Am, Geologist, vol. 44, no. 2, pp. 153-154, September, 1925.

2514. Greater Asia and isostasy (abstract): Pan-Am. Geologist, vol. 44, no. 2, pp. 156-157, September, 1925.

2515. Tidal forces in the making of continents and mountains (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, pp. 167-168, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, p. 162, March, 1926.

Termier, Pierre.

2516. The drifting of the continents: Smithsonian Inst., Ann. Rept., 1924, pp. 219-236, 1925, delayer familiable . (.2 .14 .bbs.) best best 18802

Tester, A. C. See also Twenhofel, 2603. 2517. Cone-in-cone in stratigraphic correlation (abstract): Pan-Am. Geologist, vol. 46, no. 5, p. 406, December, 1926.

Thacker, Richard B.

2518. Do all Gulf salt domes have vents?: Eng. and Min. Jour.-Press, vol. 121, no. 17, pp. 684-686, 4 figs., April 24, 1926.

Tharp, William Edgar,

2519. Notes on the areal geology of Hancock County: Indiana Acad. Sci., Proc., vol. 35, pp. 91-92, 1926.

Theis, C. V. See Kentucky Geological Survey, 1378, 1382.

Thiel, George A.

2520. Manganese precipitated by micro-organisms: Econ. Geology, vol. 20, no. 4, pp. 301-310, 2 pls., June-July, 1925.

2521. Phosphorus iron ores in the Cuyuna Range [Minnesota]; Eng. and Min. Jour.-Press, vol. 121, no. 17, pp. 687-690, 4 figs., April 24, 1926.

Thiessen, Reinhardt.

2522. (and Wilson, Ford E.). Correlation of coal beds of the Allegheny formation of western Pennsylvania and eastern Ohio: Coal-mining Investigations, Bull. 10, 56 pp., 6 figs., 23 pls., Carnegie Institute of Technology, Pittsburgh, Pennsylvania, 1924.

2523. Microscopic examination of Kentucky oil shales: Kentucky Geol. Survey, ser. 6, vol. 21, pp. 1-47, 37 pls., 1925.

Thiessen, Reinhardt-Continued.

2524. The microscopical constitution of coal: Am. Inst. Min. and Met. Eng. Trans. [preprint], no. 1438, 50 pp., March, 1925; with discussion, Trans., vol. 71, pp. 35-116, 30 figs., 1925.

2525. Origin of the boghead coals: U. S. Geol. Survey, Prof. Paper 132, pp. 121–135, 14 pls., May 14, 1925.

Thom, William Taylor, jr. See also Foley, 819.

2526. (and others). Structure map of northeastern Oklahoma, prepared by the Oklahoma Geological Survey in cooperation with the U. S. Geological Survey, 1925. Scale 1:500,000.

2527. Moisture as a component of the volatile matter of coal: Am, Inst. Min. and Met. Eng., Trans. [preprint] no. 1451, 4 pp., May, 1925; with discussion, Trans., vol. 71, pp. 282-288, 1 fig., 1925; abstract, Mining and Metallurgy, vol. 7, no. 229, p. 26, January, 1926.

2528. Relation of earth temperatures to buried hills and anticlinal folds: Econ. Geology, vol. 20, no. 6, pp. 524-530, 2 figs., September-October, 1925.

2529. Topography and geology of the coal areas [of Missouri]: U. S., Bur. Mines, Tech. Paper 366, pp. 1-4, 1 fig., 1926.

2530. Need for petroleum geology research: Oil and Gas Jour., vol. 24, no. 37, pp. 21, 143-144, February 4, 1926.

2531. (and Dobbin, C. E.). Origin of the structural features of eastern Montana (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, p. 168, March 30, 1926.

Thomas, Abram Owen. 2532. (and Ladd, H. S.). Additional cystoids and crinoids from the Maquoketa shale of Iowa: Iowa, Univ., Studies, new ser., no. 104, Studies in Natural History, vol. 11, no. 8, pp. 5-18, 6 pls., March 1, 1926.

2533. A fossil pine cone from drift of northern Iowa (abstract): Iowa Acad. Sci., Proc., vol. 31, pp. 339-340 [1926?].

2534. Pleistocene mammalian remains recently found in Iowa (abstract): Iowa Acad. Sci., Proc., vol. 31, p. 340 [1926?].

2535. Some goniatites from the Paleozoic of Iowa (abstract): Iowa Acad. Sci., Proc., vol. 31, p. 340 [1926?].

Thomas, C. R. Male than Control of the Control of t

2536. Origin of anticline in Benton shale area of western Kansas; Oil and Gas Jour., vol. 23, no. 47, pp. 128-129, April 16, 1925.

Thomas, E. T.

2537. An aid to the study of Foraminifera: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 3, pp. 667-669, May-June, 1925.

Thomas, Norman L.

2538. Brachiopods from the St. Clair limestone, Arkansas: Denison Univ. Bull., vol. 26, no. 6, pp. 385-401, 1 pl., September, 1926.

Thompson, David Grosch, and another and the state of the

2539. Memorandum on investigation of quantities of ground water available for public and industrial supplies in New Jersey; New Jersey, Report of the Water Policy Commission, Part 2, pp. (A) 29-40, February 27, 1926.

2540. Ground-water problems on the barrier beaches of New Jersey: Geol. Soc. America, Bull., vol. 37, no. 3, pp. 463-474, 5 figs., 1 pl., September 30, 1926; abstract, no. 1, pp. 161-162, March 30, 1926; Pan-Am-Geologist, vol. 45, no. 2, p. 162, March, 1926.

Thompson, W. C. See Hubbard, 1193.

Thomson, Ellis. See also Bell, 171.

2541. A reexamination of keweenawite: Toronto, Univ., Studies, Geol. ser. no. 20, pp. 35-38, 1925.

2542. Mineralographic notes on certain arsenides and sulpharsenides of cobalt, nickel, and iron: Toronto, Univ., Studies, Geol. ser. no. 20, pp. 54-58, 1925.

2543. Missinaibi map area [Michipicoten iron ranges, Ontario]: Canada, Geol. Survey, Mem. 147, pp. 143-161, 1926.

Thomson, Francis Andrew.

2544. Six years' work of the Idaho Bureau of Mines and Geology, 1919-1924: Idaho, Bur. Mines and Geology, Press Bull. no. 11, 8 pp., map, December, 1924.

2545. (and McGonigle, Fritz). Zonal distribution of gold, silver, lead, and copper ores in Idaho: Eng. and Min. Jour.-Press, vol. 120, no. 6, pp. 216–218, 1 fig., August 8, 1925.

2546. Camp Bird compound veindike (discussion): Econ. Geology, vol. 21, no. 1, pp. 90-91, January-February, 1926.

Thornberry, Martin Harmon.

2547. A treatise on Missouri clays, including production, occurrence, types, analyses, and softening points, with addenda: Missouri, Univ., School of Mines and Metallurgy, Bull., Technical ser., 69 pp., illus., February, 1925.

Thorpe, Malcolm Rutherford.

2548. The geological history of the Oreodonts: Jour. Mammalogy, vol. 6, no. 2, pp. 69-82, 5 figs., 2 pls., May, 1925.

Thurmond, F. LeRoi.

2549. Is there a Canyon Diablo meteorite?: Eng. and Min. Jour., vol. 122, no. 21, pp. 817-818, 3 figs., November 20, 1926.

Thurston, L. A. See Jaggar, 1237.

Thwaites, Fredrik Turville. If and change statement alor change in Sacre

2550. Development of the theory of multiple glaciation in North America (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, pp. 182-183. March 30, 1926.

2551. The origin and significance of pitted outwash: Jour. Geology, vol. 34, no. 4, pp. 308–319, 3 figs., May–June, 1926.

Tideswell, F. V.

2552. (and Wheeler, R. V.). The constitution of coal: Am. Inst. Min, and Met. Eng., Trans. [preprint] no. 1429, 7 pp., March, 1925; with discussion, Trans., vol. 71, pp. 176-183, 1925.

Tieje, Arthur Jerrold.

2553. The Pliocene and Pleistocene history of Baldwin Hills [California]: Min. and Oil Bull., vol. 10, no. 11, p. 1132, 2 figs., November, 1924.

2554. The Pliocene and Pleistocene history of the Baldwin Hills, Los Angeles County, California: Am. Assoc. Petroleum Geologists, Bull., vol 10, no. 5, pp. 502-512, May, 1926.

Tillyard, Robin John.

2555. Kansas Permian insects; Part 4, The order Paleodictyoptera: Am. Jour. Sci., 5th ser., vol. 9, pp. 328-335, 3 figs., April, 1925.

Tillyard, Robin John-Continued.

2556. Kansas Permian insects; Part 5, The orders Protodonata and Odonata: Am. Jour. Sci., 5th ser., vol. 10, pp. 41-73, 14 figs., July, 1925.

2557. Kansas Permian insects; Part 6, Additions to the orders Protohymenoptera and Odonata: Am. Jour. Sci., 5th ser., vol. 11, pp. 58-73, 9 figs., January, 1926.

2558. Kansas Permian insects; Part 7, The order Mecoptera: Am. Jour. Sci., 5th ser., vol. 11, pp. 133-164, 19 figs., February, 1926.

2559. Kansas Permian insects; Part 8, The order Copeognatha: Am. Jour. Sci., 5th ser., vol. 11, pp. 315-349, 19 figs., April, 1926.

2560. Kansas Permian insects; Part 9, The order Hemiptera: Am. Jour. Sci., 5th ser., vol. 11, pp. 381–395, 7 figs., May, 1926.

Tilton, John Littlefield.

2561. Cross section of the Permian in West Virginia (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 220, March 30, 1925.

2562. The definition of loess: Science, new ser., vol. 62, p. 83, July 24, 1925.

2563. Permian vertebrates from West Virginia: Geol. Soc. America, Bull., vol. 37, no. 2, pp. 385-395, 2 figs., 1 pl., June 30, 1926; abstract, no. 1, p. 238, March 30, 1926.

Timm, W. B.

2564. (and Robinson, A. H. A.). The gold fields of western Quebec: Canada,
Mines Branch, Investigations of mineral resources and the mining
industry, 1924, pp. 55-61, 1926.

2565. (and Robinson, A. H. A.). The gold ores of northwestern Quebec:
Canadian Min. Jour., vol. 46, no. 8, pp. 194-197, February 20,
1925.

Todd, E. W. Cuclement Street, of the Orondority, Journal of the Manual Company, M. J. John

2566. Groundhog River area: Ontario Dept. Mines, 33d Ann. Rept., vol. 33, pt. 6, pp. 1–17, illus., 1925.

2567. The Matabitchuan area, districts of Timiskaming and Nipissing; Ontario Dept. Mines, 34th Ann. Rept., vol. 34, pt. 3, 38 pp., illus., map. 1925; extract, Canadian Min. Jour., vol. 47, no. 6, pp. 139-142, 1 fig., February 5, 1926.

2568. Gowganda vein minerals: Ontario Dept. Mines, 35th Ann. Rept., vol. 35, pt. 3, pp. 62-78, 11 figs., 1926.

2569. Anima-Nipissing Lake area: Ontario Dept. Mines, 35th Ann. Rept., vol. 35, pt. 3, pp. 79–104, 7 figs., map, 1926.

Toepelman, Walter Carl.

2570. Underground water resources of parts of Crowley and Otero counties:
Colorado Geol. Survey, Bull. 27, pt. 2, pp. 59-72, map, 1924.

2571. Notes on the Laramie formation in central Weld County, Colorado:

Jour. Geology, vol. 34, no. 8, pp. 834-835, November-December, 1926.

Tolmachoff, I. P.

2572. Note on the Devonian fauna of Ellesmere Land: Am. Jour. Sci., 5th ser., vol. 11, pp. 47-55, January, 1926.

Tomlinson, Charles Weldon.

2573. Buried hills near Mannsville, Oklahoma: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 2, pp. 138-143, 3 figs., February, 1926.

Tondorf, Francis Anthony.

2574. Seismology, a retrospect: Washington Acad. Sci., Jour., vol. 16, no. 9, pp. 233-240, 2 figs., May 4, 1926.

Torres, Lidio A.

2575. Configuración hipotética de la región petrolífera del Pánuco en el horizonte de las calizas Tamasopo: Bol. petróleo, vol. 22, no. 2, pp. 83-104, 3 pls., August, 1926.

Torrey, Paul D.

2576. (and Fralich, Charles D.). An experimental study of the origin of salt domes: Jour. Geology, vol. 34, no. 3, pp. 224-234, 10 figs., April-May,

Trager, Earl A.

2577. The geologic history of the Panuco River valley and its relation to the origin and accumulation of oil in Mexico: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 7, pp. 667-696, 7 figs., 3 pls., July, 1926; [in Spanish], Bol. petróleo, vol. 22, no. 4, pp. 243-260, 9 pls., October, 1926.

Trask, Parker Davies, 1987, 19

2578. Origin of the Santa Lucia coast range, California (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 151, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, pp. 149-150, March, 1925.

2579. Geology of Point Sur quadrangle, California; California, Univ., Dept. Geol. Sci., Bull., vol. 16, no. 6, pp. 119-186, 2 figs., 1 pl., map, November 10, 1926.

Treasher, Ray C.

2580. Origin of the loess of the Palouse region, Washington: Science, new ser., vol. 61, p. 469, May 1, 1925.

2581. A binocular magnifier for the determination of opaque minerals: Science, new ser., vol. 64, pp. 332-333, October 1, 1926.

2582. Stratigraphic aspects of loess of Palouse region: Pan-Am. Geologist, vol. 46, no. 4, pp. 305-314, 2 pls., November, 1926.

Trechmann, C. T.

2583. The Scotland beds of Barbados: Geol. Mag., vol. 62, pp. 481-504, 4 pls., November, 1925.

2584. The Northern Range of Trinidad: Geol. Mag., vol. 62, pp. 544-551, 1 pl., December, 1925.

Troedsson, Gustaf T.

2585. Modern ideas on American stratigraphy and paleogeography: New York State Mus. Bull., no. 260, pp. 117-126, 1925.

2586. On the middle and upper Ordovician faunas of northern Greenland; I, Cephalopods: Jubilaeumsekspeditionen Nord om Groenland, 1920-23, Nr. 1 (Saertryk af Meddelelser om Groenland, LXXI), 157 pp., 17 figs., 65 pls., 1926. Also issued as Communications paléontolog'ques no. 25 of the Muséum de minéralogie et de géologie de l'Université de Copenhague, 1926.

Trowbridge, Arthur Carleton. See also Twenhofel, 2599.

2587. Reynosa formation in southwest Texas (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, pp. 164-165, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, pp. 154-155, March, 1925.

2588. (and Mortimore, Morris E.). Correlation of oil sands by sedimentary analysis: Econ. Geology, vol. 20, no. 5, pp. 409-423, 10 figs., 2 pls., August, 1925, The August Holling of the Management Holling of the Mana

Trowbridge, Arthur Carleton-Continued.

2589. Reynosa formation in lower Rio Grande region, Texas: Geol. Soc. America, Bull., vol. 37, no. 3, pp. 455-462, 3 figs., September 30, 1926.

Troxell, Edward Leffingwell.

2590. Mechanics of crocodile vertebrae: Geol. Soc. America, Bull., vol. 36, no. 4, pp. 605-614, 6 figs., December 30, 1924.

2591. The Bridger crocodiles: Am. Jour. Sci., 5th ser., vol. 9, pp. 29-72, 22 figs., January, 1925.

2592. Hyposaurus, a marine crocodilian: Am. Jour. Sci., 5th ser., vol. 8, pp. 489-514, 15 figs., June, 1925.

2593. Thoracosaurus, a Cretaceous crocodile: Am. Jour. Sci., 5th ser., vol. 10, pp. 219–233, 6 figs., September, 1925.

2594. Fossil logs and nuts of hickory: Scl. Monthly, vol. 21, no. 6, pp. 570–572, 3 figs., December, 1925.

2595. Smilodectes or Notharctus: Am. Jour. Sci., 5th ser., vol. 11, pp. 423-428, 3 figs., May, 1926.

Turner, Henry Ward.

2596. Magnesite deposits and their origin: Econ. Geology, vol. 20, no. 2, pp. 197-198, March-April, 1925.

2597. Metal content in magmas (discussion): Econ. Geology, vol. 20, no. 6, pp. 607-608, September-October, 1925.

Turner, Homer Griffield.

2598. Microscopical structure of anthracite: Am. Inst. Min. and Met. Eng.,
Trans. [preprint] no. 1409, 21 pp., 21 figs., February, 1925; with
discussion, Trans., vol. 71, pp. 127-148, 21 figs., 1925; abstract,
Mining and Metallurgy, vol. 7, no. 229, p. 26, January, 1926.

Twenhofel, William Henry.

2599. (and others). Researches in sedimentation in 1924; report of the committee on sedimentation. 78 pp., issued in mimeographed form by the National Research Council, Washington, D. C., 1925. Includes contributions by E. M. Kindle, J. Volney Lewis, A. C. Trowbridge, Eliot Blackwelder, J. A. Udden, L. Murray Neumann, W. A. Tarr, Robert W. Sayles, R. O. E. Davis, George Steiger, C. E. Van Orstrand, and W. H. Twenhofel.

2600. Significance of some of the surface structures of central and western Kansas: Am. Assoc, Petroleum Geologists, Bull., vol. 9, no. 7, pp.

1061-1070, October, 1925,

2601. (and Stryker, W. L.). The subsurface distribution of the Comanchean in western Kansas: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 7, October, 1925.

2602. Treatise on sedimentation. 661 pp., 61 figs., Baltimore, The Williams & Wilkins Company, 1926.

2603. (and others). Researches in sedimentation in 1925–1926; report of the committee on sedimentation. 98 pp., issued in mimeographed form by the National Research Council, Washington, D. C., 1926. Includes contributions by C. A. Bonine, A. C. Tester, Eliot Blackwelder, R. C. Wallace, L. W. Collet, L. Murray Neumann, Kirk Bryan, George Steiger, C. E. Van Ostrand, O. E. Meinzer, R. O. E. Davis, E. M. Kindle, T. Wayland Vaughan, M. M. Leighton, Ernst Antevs, W. H. Twenhofel, and W. A. Tarr.

Twenhofel, William Henry-Continued.

2604. Intrusive granite of the Rose dome, Woodson County, Kansas: Geol. Soc. America, Bull., vol. 37, no. 2, pp. 403–412, 2 figs., June 30, 1926: abstract, vol. 36, no. 1, pp. 166–167, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, p. 157, March 30, 1925.

2605. (and Tester, A. C.). New data on the Comanchean strata of central Kansas: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 6, pp. 553-561, June, 1926.

2606. Hunting fossils on Anticosti Island: Natural History (Am. Mus. Nat. Hist., Jour.), vol. 26, no. 5, pp. 515-524, 9 figs., September-October, 1926.

2607. Geology of the Mingan Islands: Geol. Soc. America, Bull., vol. 37, no. 4, pp. 535-550, 1 fig., December 30, 1926; abstract, no. 1, pp. 172-173, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, pp. 165-166, 1926.

Twitchell, Mayville W.

2608. The mineral industry of New Jersey for 1923: New Jersey, Dept. Conservation and Development, Geol. ser., Bull. 26, 15 pp., 1925.

2609. The mineral industry of New Jersey for 1924: New Jersey, Dept. Conservation and Development, Geol. ser., Bull. 27, 14 pp., 1925.

2610. Important ground water horizons in New Jersey: New Jersey, Report of the Water Policy Commission, Part 2, pp. (A) 41-53, February 27, 1926.

Tyrrell, Joseph Burr.

2611. (and Hore, R. E.). The Kirkland Lake fault: Roy. Soc. Canada, Proc. and Trans.. 3d ser., vol. 20, sec. 4, pp. 51-63, 4 figs., 1926; Canadian Min. Jour., vol. 46, no. 23, pp. 561-564, June 5, 1925.

2612. Memorial of Willet Green Miller: Geol. Soc. America, Bull., vol. 37, no. 1, pp. 99-110, 1 pl. (portr.), March 30, 1926; Canadian Min. Jour., vol. 47, no. 41, pp. 973-976, October 8, 1926.

2613. (and Hore, R. E.). Geology of the Kirkland Lake gold mine [Ontario]: Mining and Metallurgy, vol. 7, no. 231, pp. 118-121, 2 figs., March, 1926.

Udden, Johan August. See also Twenhofel, 2599.

2614. Study of the laminated structure of certain drill cores obtained from the Permian rocks of Texas, with particular reference to the bearing of the stratigraphic sequence upon problems of climatic variation: Carnegie Inst. Washington, Year Book no. 24, p. 345, December, 1925.

2615. Etched potholes: Texas, Univ., Bull. no 2509, 9 pp., 2 figs., 6 pls., December, 1925.

2616. Texas Bureau of Economic Geology [activities]: Pan-Am. Geologist, vol. 44, no. 4, pp. 327-328, November, 1925.

2617. The Southwest earthquake of July 30, 1925: Texas, Univ., Bull. no. 2609, 32 pp., 1 pl. (map), June, 1926.

Udden, Jon Andreas.

2618. Occurrence of Ordovician sediments in western Kansas: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 6, pp. 634-635, June, 1926.

Uglow, William Lawrence. See also Johnston, 1301; Young, 2897.

2619. (and Osborne, F. F.). A gold-cobaltite-lodestone deposit, British Columbia, with notes on the occurrence of cobaltite: Econ. Geology, vol. 21, no. 3, pp. 285-293, May, 1926.

Uglow, William Lawrence—Continued.

2620. Genesis of the magnetite deposits near the west coast of Vancouver Island: Econ. Geology, vol. 21, no. 4, pp. 352-363, June-July, 1926.

Ulrich, Edward Oscar.

2621. (and Bassler, Ray S.). A classification of the toothlike fossils, conodonts, with descriptions of American Devonian and Mississippian species: U. S. Nat. Mus., Proc., vol. 68, art. 12, 63 pp., 5 figs., 11 pls., 1926.

2622. (and Mesler, R. D.). Fauna and stratigraphy of the Saint Clair limestone of Arkansas and Oklahoma (abstract): Geol. Soc. America,

Bull., vol. 37, no. 1, pp. 243-244, March 30, 1926.

2623. Relative values of criteria used in drawing the Ordovician-Silurian boundary: Geol. Soc. America, Bull., vol. 37, no. 2, pp. 279-348, June 30, 1926.

2624. Organic and physical criteria in stratigraphic correlation (abstract):
Pan-Am. Geologist, vol. 46, no. 1, p. 73, August, 1926.

2625. Comparison of European and American Paleozoic sections (abstract):
Pan-Am. Geologist, vol. 46, no. 1, pp. 73-74, August, 1926.

Umpleby, Joseph Bertram,

2626. Increasing the extraction of oil by water flooding: Am. Inst. Min. and Met. Eng., no. 1570 (Petroleum development and technology in 1925), pp. 112-129, 16 figs., April, 1926.

United States Geological Survey.

2627. Relief map, State of Idaho. Scale, 1 inch=12 miles. 1926. Relief shading by R. W. Berry.

Memoranda for the press [mimeographed]:

2628. Kevin-Sunburst oil field, Montana. 4 pp., map, January 12, 1926. (4655)

2629. Possibility of finding oil in anticline near Edgemont, South Dakota.
2 pp., map, August 19, 1926. (8580)

2630. Oil-bearing formations of southwestern Arkansas. 7 pp., 1 pl. (sections), September 10, 1926. (8823)

2631. Lead and zinc ores of Sharp and Lawrence counties, Arkansas. 2 pp. November 17, 1926. (10707)

2632. Result of core-drilling test in New Mexico. 2 pp., 1 pl. (log of boring),
December 8, 1926. (10994)

Uren, Lester Charles.

2633. The elements of the oil-well-spacing problem: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 2, pp. 193-216, 6 figs., March-April, 1925.

Van der Gracht, W. A. J. M. van Waterschoot. See Foley, 819.

Van Deloo, Jacob.

2634. Twenty-first report of the director of the State Museum and science department, including the seventy-eighth report of the State Museum, the forty-fourth report of the State geologist, and report of the State paleontologist for 1925: New York State Mus. Bull., no. 267, 107 pp., illus., 1926.

Van Horn, Frank R.

2635. Proceedings of the fifth annual meeting of the Mineralogical Society of America [Ithaca, New York, December 31, 1924]: Am. Mineralogist, vol. 10, no. 3, pp. 61-68, March, 1925.

Van Horn, Frank R .- Continued.

2636. Proceedings of the fifth annual meeting of the Mineralogical Society of America, held at Cornell University, Ithaca, New York, December 31, 1924: Geol. Soc. America, Bull., vol. 36, no. 1, pp. 241–246, March 30, 1925.

2637. The occurrence of a large iron-tourmaline in Alabama pegmatite: Am. Mineralogist, vol. 10, no. 10, pp. 348-350, 2 figs., October, 1925.

2638. Suggestions concerning the use of species names in the garnet, amphibole, pyroxene, and tourmaline groups (abstract): Am. Mineralogist, vol. 11, no. 3, pp. 52-54, March, 1926.

2639. Proceedings of the sixth annual meeting of the Mineralogical Society of America: Am. Mineralogist, vol. 11, no. 3, pp. 59-68, March,

1926.

2640. Proceedings of the sixth annual meeting of the Mineralogical Society of America, held at New Haven, Connecticut, December 28, 29, 30, 1925; Geol. Soc. America, Bull., vol. 37, no. 1, pp. 255-260, March 30, 1926.

Van Name, Willard G.

2641. The supposed Paleozoic barnacle *Protobalanus* and its bearing on the origin and phylogeny of the barnacles: Am. Mus. Novitates, no. 197, 8 pp., 3 figs., November 21, 1925.

2642. A new specimen of Protobalanus, supposed Paleozoic barnacle: Am. Mus. Novitates, no. 227, 6 pp., 2 figs., October 11, 1926.

Van Orstrand, Charles Edwin. See also Twenhofel, 2599, 2603.

2643. Some evidence on the variation of temperature with geologic structure in California and Wyoming oil districts: Econ. Geology, vol. 21, no. 2, pp. 145-165, 11 figs., March-April, 1926.

2644. A possible dependence of deep-earth temperatures on geologic structure (abstract): Washington Acad. Sci., Jour., vol. 16, no. 18, p. 503, November 3, 1926.

Van Tuyl, Francis Maurice.

2645. The stratigraphy of the Mississippian formations of Iowa: Iowa Geol. Survey, vol. 30, pp. 33-349, 16 figs., 6 pls. (incl. map) [1925].

2646. (and Blackburn, Chester O.). The effect of rock flowage on the kerogen of o'll shale: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 1, pp. 158-164, 1 fig., January-February, 1925.

2647. The occurrence of dolomite: Colorado School of Mines Mag., vol. 14, no. 11, pp. 14-17, March, 1925.

2648. The future oil supply: Colorado School of Mines Mag., vol. 15, no. 2, pp. 6-9, June, 1925.

2649. (and Beckstrom, R. C.). Pressure effect on migration and accumulation of petroleum: Oil and Gas Jour., vol. 24, no. 6, pp. 70, 74, 78, 92, July 2, 1925.

2650. (and Blackburn, Chester O.). The relation of oil shale to petroleum:

Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 8. November,
1925.

2651. The effect of pressure on the migration and accumulation of petroleum:

Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 10, pp. 917–
930, 4 figs., October, 1926.

Vassar, Helen E. See also Gage, 855; Larsen, 1540; Palache, 1941, 1944.

2652. Clerici solution for mineral separation by gravity: Am. Mineralogist, vol. 10, no. 5, pp. 123-125, 1 fig., May, 1925.

Vaughan, Francis Edward.

2653. The Five Islands, Louisiana: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 4, pp. 756–797, 12 figs., July, 1925; Geology of salt dome oil fields, pp. 356–397, 12 figs., 1926.

Vaughan, Thomas Wayland. See also Twenhofel, 2603.

2654. Recent progress in the study of the tectonic features of the West Indies and Central America: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 1, pp. 735-741 [1924].

2655. A sketch of the history of igneous activity in the northern and northeastern West Indies: Pan-Pacific Sci. Cong., Australia, 1923, Proc.,

vol. 1, pp. 851-855 [1924].

2656. Correlation of the Cainozoic formations in the Pacific region; introduction to the symposium: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 1, pp. 860-862 [1924].

2657. Recent additions to knowledge of the correlation of the Tertiary geologic formations of northeastern Mexico, Central America, the West Indies, northern South America, and Lower California: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 1, pp. 864-870 [1924].

2658. The embryonic and meridional chambers of American species of lepidocycline Foraminifera: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 1, pp. 871-873 [1924].

2659. The ecology and growth rate of corals: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 2, pp. 1092-1101 [1924].

2660. Coral reefs and submerged platforms: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 2, pp. 1128–1134 [1924].

2661. (and Hoffmeister, John Edward). New species of fossil corals from the Dominican Republic: Harvard Coll., Mus. Comp. Zoology, Bull., vol. 67, no. 8, pp. 315-326, 4 pls., November, 1925.

2662. (and Hoffmeister, John Edward). Miocene corals from Trinidad: Carnegie Inst. Washington, Pub. no. 344 (Papers from the Department of Marine Biology of the Carnegie Institution of Washington, vol. 33), pp. 105-134, 1 fig., 7 pls., February, 1926.

2663. Application of the generic name *Phyllocoenia* Milne Edwards and Haime and the International code of zoological nomenclature: Science, new ser., vol. 63, pp. 338-339, March 26, 1926.

2664. Notes on the igneous rocks of the northeast West Indies and on the geology of the Island of Anguilla: Washington Acad. Sci., Jour., vol. 16, no. 13, pp. 345-358, July 19, 1926.

2665. The stratigraphic horizon of the beds containing Lepidocyclina chaperi on Haut Chagres, Panama: Nat. Acad. Sci., Proc., vol. 12, no. 8, pp. 519-522, August, 1926.

2666. Species of Lepidocyclina and Carpenteria from the Cayman Islands and their geological significance: Geol. Soc. London, Quart. Jour., vol. 82, pt. 3, pp. 388–400, 3 pls., October 19, 1926.

Veatch, Jethro Otto.

2667. Geology as a factor in soil classification (abstract); Pan-Am. Geologist, vol. 44, no. 2, pp. 157–158, September, 1925.

Ver Wiebe, Walter A.

2668. Geology of southern Mexico oil fields: Pan-Am. Geologist, vol. 44, no. 2, pp. 121-138, 2 pls. (incl. map), September, 1925.

2669. Oil fields of southern Mexico (abstract): Pan-Am. Geologist, vol. 44, no. 2, p. 151, September, 1925.

Ver Wiebe, Walter A.—Continued.

2670. Geology and oil fields of State of Tabasco [Mexico]: Pan-Am. Geologist, vol. 44, no. 4, pp. 273-284, 1 pl., November, 1925.

2671. Tectonics of the Tehuantepec Isthmus; Pan-Am. Geologist, vol. 45, no. 1, pp. 15-28, 1 pl. (map), February, 1926.

2672. Oil fields of Isthmus of Tehuantepec [Mexico]: Pan-Am, Geologist, vol. 45, no. 3, pp. 189-200, 1 fig., 1 pl., April, 1926.

2673. Salt domes of Isthmus of Tehuantepec: Pan-Am, Geologist, vol. 45, no. 5, pp. 349-358, June, 1926.

Vickery, Frederick P.

2674. The structural dynamics of the Livermore region; Jour. Geology, vol. 33, no. 6, pp. 608-628, 8 figs., August-September, 1925.

Vilbrandt, Frank C. and and saided interes subsequing second sense ones ones

2675. An oil-bearing shale of North Carolina: Elisha Mitchell Sci. Soc., Jour., vol. 41, nos. 1-2, pp. 108-114, September, 1925.

Villafaña, E. a. del my da dor de wag angele appropriation de la company

2676. El distrito minero Tepezala-Asientos, Aguascalientes: Bol. minero, t. 15, no. 4, pp. 465-470, 5 pls., April, 1923.

Visher, Stephen Sargent.

2677. The solar-cyclonic hypothesis and the Glacial Period: Sci. Monthly, vol. 20, no. 5, pp. 475-478, May, 1925.

2678. Glacial periods and solar-cyclonic hypothesis (abstract); Pan-Am. Geologist, vol. 44, no. 1, p. 74, August, 1925.

Vivar, Gonzala.

2679. Informe preliminar acerca de la geología y zonas petrolíferas de la parte norte de los Estados de Tamaulipas y Nuevo León: Mexico, Departamento de exploraciones y estudios geológicos, Folleto de divulgación, no. 14, 12 pp., map, October, 1925.

2680. Informe preliminar sobre el estudio geológico-petrolero de la región de Ojinaga, Estado de Chihuahua: Mexico, Departamento de exploraciones y estudios geológicos, Folleto de divulgación, no. 16, 12 pp., October, 1925.

2681. Bosquejo geológico de una parte del Estado de Colima: Mexico, Inst. geol., Anales, t. 2, no. 5, pp. 131-154, 5 pls., map, 1926.

Vogdes, Anthony Wayne.

2682. Paleozoic Crustacea; Part I, A bibliography of Paleozoic Crustacea; Part II, A list of the genera and subgenera of the Trilobita; Part III, A summary of the Ordovician genus Cybele Lovén: San Diego Soc. Nat. Hist., Trans., vol. 4, 154 pp., 2 pls., June 22, 1925.

Vogt, Johan Herman Lie.

2683. Magmas and igneous ore deposits: Econ. Geology, vol. 21, no. 3, pp. 207-233, no. 4, pp. 309-332, no. 5, pp. 469-497, 6 figs., May-August, 1926.

Von Engeln, Oscar Diedrich. See also Tarr, 2505.

2684. The geography of the Ithaca, New York, region: Assoc. Am. Geographers, Annals, vol. 16, no. 3, pp. 124-150, 2 figs., September, 1926.

Wade, Bruce.

2685. The fauna of the Ripley formation on Coon Creek, Tennessee (Bryozoa, by Ferdinand Canu and R. S. Bassler, pp. 32-39; Crustacea, by Mary J. Rathbun, pp. 184-191; Reptilia, by C. W. Gilmore, pp. 191-192; Pisces, by J. W. Gidley, p. 192): U. S. Geol. Survey, Prof. Paper 137, 272 pp., 2 figs., 72 pls., 1926.

Wagner, Percy Albert.

2686. The danger of generalizations: Econ. Geology, vol. 20, no. 3, pp. 282-285, May, 1925.

2687. Wood tin-gel replacement of cassiterite (discussion): Econ. Geology, vol. 21, no. 7, pp. 727-731, November, 1926.

2688. The microscope and ore geology; Econ. Geology, vol. 21, no. 8, pp. 803-805, December, 1926. Waitz, Paul. Paris of manual respondential to samulat to semon thes extent

2689. Erupciones rhyolíticas ligadas can fracturas tectónicas eutre Aguascalientes y San Luis Potosí: Soc. cient. Ant. Alzate, Mem., t. 46, no. 3-6, pp. 201-212, March-June, 1926. Walcott, Albert J.

2690. Some factors influencing crystal habit: Am. Mineralogist, vol. 11, no. 9, pp. 221–239, September, no. 10, pp. 259–278, November, 1926.

Walcott, Charles Doolittle.

2691. Science and service: Science, new ser., vol. 61, pp. 1-5, January 2, 1925.

2692. The geological record and the American continent (abstract): Science, new ser., vol. 61, pp. x, xii, January 9, 1925.

2693. Geological explorations in the Canadian Rockies (abstract): Science, new ser., vol. 61, p. 129, February 6, 1925.

2694. Cambrian geology and paleontology, V, No. 3, Cambrian and Ozarkian, trilobites: Smithsonian Misc. Coll., vol. 75, no. 3, pp. 59-146, 2 figs., 10 pls., June 1, 1925.

2695. John Mason Clarke: Science, new ser., vol. 62, p. 558, December 18, 1925.

Waldschmidt, W. A. See also Johnson, 1290.

2696. Deformation in ores, Coeur d'Alene district, Idaho: Econ. Geology, vol 20, no. 6, pp. 573-586, 2 pls., September-October, 1925.

Walker, John Fortune. See also Ellsworth, 728.

2697. Geology and mineral deposits of Windermere map area, British Columbia: Canada, Geol. Survey, Mem. 148, 69 pp., 3 figs., 8 pls., map. 1926.

2698. Reconnaissance in the Purcell Range west of Brisco, Kootenay district, British Columbia: Canada, Geol. Survey, Summ. Rept., 1925, pt. A, pp. 222-229, map, 1926.

Walker, Thomas Leonard.

2699. (and Parsons, A. L.). Evanescent pink sodalite and associated minerals from Dungannon Township, Ontario: Toronto, Univ., Studies Geol. ser. no. 20, pp. 5-13, 1925.

2700. (and Parsons, A. L.). The characteristics of primary calcite: Toronto. Univ., Studies, Geol. ser. no. 20, pp. 14-17, 1 pl., 1925.

2701. (and Parsons, A. L.). Zonal pleochroic twinned phlogopite: Toronto, Univ., Studies, Geol. ser. no. 20, pp. 18-19, 1 pl., 1925.

2702. (and Parsons, A. L.). Petzite from the Hollinger mine, Timmins, Ontario: Toronto, Univ., Studies, Geol. ser. no. 20, pp. 39-40, 1925.

2703. (and Parsons, A. L.). The rate of oxidation of arsenides of iron, cobalt, and nickel: Toronto, Univ., Studies, Geol. ser. no. 20, pp. 41-48, 1925.

2704. Arsenides from the silver veins of South Lorrain, Ontario: Toronto, Univ., Studies, Geol. ser. no. 20, pp. 49-53, 2 pls., 1925. Mary J. Rathban, pp. 181-191; Repfilla, by C. W. Gilmerk, pp. 191-102; Places, by J. W. Godley, p. 1921; U. S. Geel, Survey, Prof.

Walker, Thomas Leonard-Continued.

2705. (and Parsons, A. L.). A comparison of the Port Arthur, Cobalt, South Lorrain, and Gowganda silver vein minerals: Toronto, Univ., Studies, Geol. ser. no. 20, pp. 59-62, 1925.

2706. (and Parsons, A. L.). New localities for Canadian minerals: Toronto, Univ., Studies, Geol. ser. no. 20, pp. 68-71, 1925.

2707. (and Parsons, A. L.). Minerals from the new nepheline syenite area, French River, Ontario: Toronto, Univ., Studies, Geol. ser., no. 22, pp. 5-14, 3 figs., 1 pl., 1926.

2708. (and Parsons, A. L.). Zeolites and related minerals from Lake Nipigon, Ontario: Toronto, Univ., Studies, Geol. ser., no. 22, pp. 15–19, 1926.

2709. (and Parsons, A. L.). Apatite, lepidomelane, and associated minerals from Faraday Township, Hastings County, Ontario: Toronto, Univ., Studies, Geol. ser., no. 22, pp. 20–25, 4 figs., 1 pl., 1926.

2710. (and Parsons, A. L.). Changes in water level and flotation as forces of erosion: Toronto, Univ., Studies, Geol. ser., no. 22, pp. 26-28, 1 fig., 1 pl., 1926.

Wallace, Robert Charles. See also Twenhofel, 2603.

2711. The mineral resources of Manitoba: Manitoba, Industrial Development Board, 48 pp., illus., map, Winnipeg, 1925.

2712. The geological formations of Manitoba. 58 pp., 8 pls., map, published by the Natural History Society of Manitoba, 1925.

2713. Relationships in mineral deposits in northwestern Manitoba: Econ. Geology, vol. 20, no. 5, pp. 431–441, 1 fig., August, 1925.

2714. Mineral deposits of Hudson Bay territory (with discussion): Canadian Inst. Min. and Met., Bull., no. 164, pp. 1165–1176, 3 figs., December, 1925; Trans., vol. 28, pp. 301–310 [1926].

2715. (and Baker, W. F., and Ward, G.). The Red River as an erosive agent: Roy. Soc. Canada, Proc. and Trans., 3d ser., vol. 20, pt. 2, sec. 4, pp. 149–167, 3 figs., 1926.

Walter. Otto Theodore.

2716. Trilobites of Iowa and some related Paleozoic forms: Iowa Geol. Survey, vol. 31, pp. 167-388, 6 figs., 18 pls. [1926?].

Wandke, Alfred.

2717. The Caridad mine, Sonora, Mexico: Econ. Geology, vol. 20, no. 4, pp. 311-318, June-July, 1925.

2718. Shattering by replacement: Econ. Geology, vol. 20, no. 6, pp. 605-607, 1 fig., September-October, 1925.

2719. Molecular migration and mineral transformation: Econ. Geology, vol. 21, no. 2, pp. 166–171, March-April, 1926.

Wanless, Harold Rollin.

2720. Physiographic significance of post-Miocene gravels of western South Dakota (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 140, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 1, p. 80, February, 1925.

Ward, Freeman.

2721. The biennial report of the State geologist, 1922–1924: South Dakota Geol. and Nat. Hist. Survey, 24 pp. [1925].

2722. Structures in northern Haakon County: South Dakota Geol. and Nat. Hist. Survey, Circular 22, 15 pp., 3 figs., March, 1925.

86012-28-12

Ward, Freeman-Continued.

2723. The structure of western South Dakota: South Dakota Geol. and Nat. Hist. Survey, Circular 25, 7 pp., map, October, 1925.

2724. The biennial report of the State geologist, 1924-1926: South Dakota Geol. and Nat. Hist. Survey, 22 pp. [1926?].

2725. The position of the Interior formation [South Dakota]: Am. Jour. Sci., 5th ser., vol. 11, pp. 350-352, 1 fig., April, 1926.

Ward, G. See Wallace, 2715.

Waring, Gerald Ashley.

2726. (and Carlson, C. G.). Geology and oil resources of Trinidad, British West Indies: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 6, pp. 1000–1008, 1 fig., 1 pl., September, 1925.

2727. The geology of the Island of Trinidad, British West Indies: Johns Hopkins Univ., Studies in Geology, no. 7, 180 pp., 1 fig., 20 pls., 1926.

Warner, Thor.

2728. Lindero anticline, Ventura County, California: Min. and Oil Bull., vol. 10, no. 6, pp. 589, 591, 652, June, 1924.

Warren, P. S. affect and orbital and committee and another out 1172

2729. A Kinderhook fauna from Nordegg, Alberta: Am. Jour. Sci., 5th ser., vol. 10, pp. 448-450, November, 1925.

2730. The invertebrate fauna of the upper part of the Edmonton formation on the Red Deer River, Alberta: Roy. Soc. Canada, Proc. and Trans., 3d ser., vol. 20, pt. 1, sec. 4, pp. 1–7, 1 pl., 1926.

2731. A marine fauna in the Birch Lake sandstone, Alberta: Roy. Soc. Canada, Proc. and Trans., 3d ser., vol. 20, pt. 1, sec. 4, pp. 9-14, 1 pl., 1926.

Washburne, Chester Wesley.

2732. California oil field waters (discussion): Econ. Geology, vol. 20, no. 4, pp. 395-396, June-July, 1925.

2733. Relation of earth temperatures to buried hills and anticlinal folds (discussion): Econ. Geology, vol. 21, no. 4, pp. 397–399, June-July, 1926.

Washington, Henry Stephens. See also Bowie, 249.

2734. The modern study of minerals: Am. Mineralogist, vol. 10, no. 3, pp. 45-52, March, 1925.

2735. The chemical composition of the earth; Am. Jour. Sci., 5th ser., vol. 9, pp. 351-378, 2 figs., May, 1925.

2736. What the earth is made of: Sci. Am., vol. 133, pp. 10-11, 3 figs., July,

2737. (and Keyes, Mary G.). Petrology of the Hawaiian Islands, V; The Leeward Islands; Am. Jour. Sci., 5th ser., vol. 12, pp. 336-352, October, 1926.

2738. The chemical composition of the earth, of meteorites, and of the sun's atmosphere: Nat. Research Council, Bull., vol. 11, pt. 2, no. 56, pp. 30-32, November, 1926; abstract, Am. Jour. Sci., 5th ser., vol. 12, p. 272, September, 1926.

Watson, Thomas Leonard. See also Ries, 2119.

2739. Hoegbomite from Virginia: Am. Mineralogist, vol. 10, no. 1, pp. 1-9, 3 figs., January, 1925.

Watts, William Whitehead.

2740. Geology in the service of man: Canadian Min. Jour., vol. 45, no. 33, pp. 792-795, August 15, 1924; Pan-Am, Geologist, vol. 42, no. 1, pp. 1-29, August, 1924; British Assoc. Adv. Sci., Rept. 92d Meeting, pp. 89-108, 1925; Smithsonian Inst., Ann. Rept., 1925, pp. 271-296, 1926.

Weed, Walter Harvey.

2741. Superficial copper deposits: Eng. and Min. Jour.-Press, vol. 119, no. 15, p. 605, April 11, 1925.

2742. Veindikes of the Engineer mine, near Atlin, British Columbia: Eng. and Min. Jour.-Press, vol. 119, no. 26, pp. 1037-1040, 7 figs., June 27,

Weeks, Albert W. I amol canapatons him for solicens sides we have

2743. Some experimental work testing the hydraulic theory of oil migration and accumulation by means of the downward circulation of water. Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 8, pp. 1143-1151, 1 fig., November, 1925.

2744. Methods of plotting well logs: Econ. Geology, vol. 20, no. 7, pp. 693, November, 1925.

Weeks, Fred Boughton.

2745. Possibilities of the Calico mining district [San Bernardino County, California]: Eng. and Min. Jour.-Press, vol. 119, no. 19, pp. 757-763, 3 figs., May 9, 1925.

Weeks, Herbert J.

2746. Oil and water possibilities of parts of Delta and Mesa counties, Colorado: Colorado Geol. Survey, Bull. 28, 46 pp., 7 figs., 2 pls. (maps), 1925.

Weeks, L. J.

2747. Geology and ore deposits of Stirling area, Richmond County, Nova Scotia: Canada, Geol. Survey, Summ. Rept., 1924, pp. 199-217, 2 figs., 1 pl., 1926.

Weidman, Samuel.

2748. Tri-State lead and zinc district: Bureau Monthly, published by Bureau of Geology, Norman, Okla., vol. 1, no. 1, p. 19, 2 figs., April, 1925.

Weinig, A. J.

2749. Angular fragments in veins: Eng. and Min. Jour., vol. 122, no. 26, pp. 1020-1021, 1 fig., December 25, 1926.

Weller, J. Marvin. See Moulton, 1863.

Weller, Stuart. See also Kentucky Geological Survey, 1386, 1387.

2750. Problematic fossil from the Silurian of Illinois (abstract); Geol. Soc. America, Bull., vol. 36, no. 1, p. 217, March 30, 1925.

2751. A new type of Silurian worm: Jour. Geology, vol. 33, no. 5, pp. 540-544, 1 fig., July-August, 1925.

2752. The making of southern Illinois: Illinois State Acad. Sci., Trans., vol. 19, pp. 27-49, 1926.

2753. Faunal zones in the standard Mississippian section: Jour. Geology, vol. 34, no. 4, pp. 320-335, May-June, 1926.

Weller, Stuart-Continued.

2754. Fossil collecting in the Mississippian formations of the Mississippia Valley: Natural History (Am. Mus. Nat. Hist., Jour.), vol. 26, no. 5, pp. 487-495, 12 figs., September-October, 1926.

Wells, Roger Clark.

2755. Chemistry of deposition of native copper from ascending solutions:
U. S. Geol. Survey, Bull. 778, 71 pp., 2 figs., 1925.

2756. Observations on the minor constituents of petroleum: Econ. Geology, vol. 20, no. 3, pp. 286-288, May, 1925.

Wentworth, Chester Keeler.

2757. The geology of Lanai [Hawaiian Islands]: Bernice P. Bishop Mus., Bull. 24, 72 pp., 13 figs., 7 pls., 1925.

2758. Photographic practice for field geologists: Iowa, Univ., Studies, new ser., no. 89, Studies in Natural History, vol. 11, no. 4, pp. 17-41, 5 pls., March 15, 1925.

2759. The desert strip of west Molokai [Hawaiian Islands]: Iowa, Univ., Studies, new ser., no. 89, Studies in Natural History, vol. 11, no. 4, pp. 41-56, 4 figs., 3 pls., March 15, 1925.

2760. A tropical peat bog [Washington Island, North Pacific] (abstract):
Geol. Soc. America, Bull., vol. 36, no. 1, p. 137, March 30, 1925;
Pan-Am. Geologist, vol. 43, no. 1, p. 78, February, 1925.

2761. Tuff craters of Oahu (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, pp. 151-152, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, p. 150, March, 1925.

2762. Chink-faceting; a new process of pebble-shaping; Jour. Geology, vol. 33, no. 3, pp. 260-267, 5 figs., April-May, 1925.

2763. Eustatic bench of islands of the north Pacific; Geol. Soc. America, Bull., vol. 36, no. 3, pp. 521-544, 14 figs., September 30, 1925; abstract (by Chester K. Wentworth and H. S. Palmer), no. 1, pp. 136-137, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 1, pp. 77-78, February, 1925.

2764. Pyroclastic geology of Oahu (with the collaboration of A. A. Pegau in petrology): Bernice P. Bishop Mus., Bull. 30, 121 pp., 28 figs., 22 pls., 1926.

2765. Physical features of the Hawaiian Islands (abstract): Iowa Acad. Sci., Proc., 1925, vol. 32, pp. 359–360 [1926].

2766. Sedimentary processes on volcanic islands (abstract): Iowa Acad. Sci., Proc., 1925, vol. 32, pp. 360–361 [1926].

2767. Graphic computation of volumes of contoured solids: Am. Jour. Sci., 5th ser., vol. 11, pp. 305-311, 3 figs., April, 1926.

2768. Principles of erosion in Hawaii (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, pp. 171-172, March 30, 1926; Pan-Am. Geologist, vol. 45, no. 2, p. 167, March, 1926.

2769. Methods of mechanical analysis of sediments: Iowa, Univ., Studies in Natural History, vol. 11, no. 11, 52 pp., 9 figs., October 15, 1926.

Westgate, Lewis Gardner.

2770. Geology of Delaware County: Ohio, Geol. Survey, 4th ser., Bull. 30, 147 pp., 28 figs., 12 pls., 2 maps, 1926.

Wetmore, Alexander.

2771. The systematic position of *Palaeospiza bella* Allen, with observations on other fossil birds: Harvard College, Mus. Comp. Zoology, Bull., vol. 67, no. 2, pp. 183–193, 4 figs., 4 pls., May, 1925.

Wetmore, Alexander-Continued.

2772. Descriptions of additional fossil birds from the Miocene of Nebraska: Am. Mus. Novitates, no. 211, 5 pp., 6 figs., March 11, 1926.

2773. Fossil birds from the Green River deposits of eastern Utah: Carnegie Mus., Annals, vol. 16, nos. 3-4, pp. 391-399, 2 pls., April, 1926.

2774. Description of a fossil hawk from the Miocene of Nebraska: Carnegie Mus., Annals, vol. 16, nos. 3-4, pp. 403-406, 1 pl., April, 1926.

2775. The fossil birds of North America: Natural History (Am. Mus. Nat. Hist., Jour.), vol. 26, no. 5, pp. 525-526, September-October, 1926. Wheeler, H. A. Study ilesol of betachted as classic closested reggl 2072.

2776. The oil resurrection of Colorado: Eng. and Min. Jour.-Press, vol. 119, no. 2, pp. 51-54, January 10, 1925.

Wheeler, H. C.

2777. (and Clifton, R. L.). Age and correlation of Garber sands [Garber oil field, Oklahoma]: Oil and Gas Jour., vol. 24, no. 27, pp. 34, 92, 101, 104, 3 figs., November 26, 1925.

Wheeler, Richard Vernon. See Tideswell, 2552.

Wherry, Edgar Theodore. See also Larsen, 1542.

2778. Radio-detector minerals: Am. Mineralogist, vol. 10, no. 2, pp. 28-31, February, 1925.

2779. Bentonite as a one-dimensional colloid: Am. Mineralogist, vol. 10, no. 5, pp. 120-123, May, 1925.

2780. A tabulation of the aluminium silicate minerals: Am. Mineralogist, vol. 10, no. 6, pp. 140-145, 1 fig., June, 1925.

2781. Pseudo-isomorphism as illustrated in thomsonite: Am. Mineralogist, vol. 10, no. 10, pp. 342-347, October, 1925.

2782. A visit to the locality of newtonite [Newton County, Arkansas]: Am. Mineralogist, vol. 10, no. 10, pp. 350-351, October, 1925.

White, [Charles] David. See also Stadnichenko, 2421, 2422.

2783. Permian of western America from the paleobotanical standpoint: Pan-Pacific Sci. Cong., Australia, 1923, Proc., vol. 2, pp. 1050-1077

2784. Researches in geology of finding oil; Oil and Gas Jour., vol. 23, no. 20-A, pp. 64-A, 196-H, October 9, 1924.

2785. (and Stadnichenko, T.). Some mother plants of petroleum in the Devonian black shales: Kentucky Geol. Survey, ser. 6, vol. 21, pp. 99-117, 5 pls., 1925.

2786. Quelques relations entre les charbons de différentes espèces et la composition des dépôts sédimentaires originels: Soc. géol. Belgique, Livre jubilaire, 1874-1924, t. 1, pp. 365-378, 1 pl., 1925.

2787. Public geology and national mineral wealth: International Geol. Cong., 13th Sess., Belgium, 1922, fasc. 3, pp. 1711-1718, 1925.

2788. Plant fossils [indications of ancient climate] (abstract): Science, new ser., vol. 61, p. xii, January 9, 1925.

2789. Environmental conditions of deposition of coal: Am. Inst. Min. and Met. Eng., Trans. [preprint], no. 1402, 21 pp., January, 1925; (with discussion), Trans., vol. 71, pp. 3-34, 1925; abstract, Mining and Metallurgy, vol. 6, no. 222, p. 298, June, 1925.

White, [Charles] David-Continued.

2790. Progressive regional carbonization of coals: Am. Inst. Min' and Met. Eng., Trans. [preprint], no. 1414, 27 pp., 3 figs., February, 1925; (with discussion), Trans., vol. 71, pp. 253–281, 3 figs., 1925; abstract, Mining and Metallurgy, vol. 6, no. 222, pp. 300–301, June, 1925.

2791. Projected oceanographic investigations (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, p. 147, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, pp. 146–147, March, 1925.

2792. Upper Paleozoic climate as indicated by fossil plants: Sci. Monthly, vol. 20, no. 5, pp. 465-473, May, 1925.

2793. Coal: Sci. Monthly, vol. 21, no. 2, pp. 177-181, August, 1925.

2794. Late Paleozoic climates as indicated by fossil plants (abstract): Pan-Am. Geologist, vol. 44, no. 1, p. 73, August, 1925.

2795. General features of the Mississippian floras of the Appalachian trough:
West Virginia Geol. Survey, Mercer, Monroe, and Summers counties, pp. 837-843, 1926.

2796. Geologic factors affecting and possibly controlling Pleistocene ice sheet development in North America (abstract): Washington Acad. Sci., Jour., vol. 16, no. 3, pp. 69–72. February 4, 1926.

2797. Some cold waves of geologic history: Sci. Monthly, vol 22, no. 4, pp. 359-363, April, 1926.

White, George W.

2798. The limestone caves and caverns of Ohio: Ohio Jour. Sci., vol. 26, no. 2, pp. 73-116, 16 figs., March, 1926.

White, Israel Charles. See also Miller, 1789.

2799. Memorial of John James Stevenson: Geol. Soc. America, Bull., vol. 36, no. 1, pp. 100–115, portr., March 30, 1925.

2800. Greatest coal field in the world [West Virginia]: Pan-Am. Geologist, vol. 44, no. 1, pp. 65-67, August, 1925.

2801. (and Ashley, G. H., and Bownocker, J. A.). The Pittsburgh coal bed (with discussion): Am. Inst. Min. and Met. Eng., Trans., vol. 74, pp. 481-506, 7 figs. (incl. maps), 1926.

White, Luther H. and and has the Manual has to enclose the same and the

2802. Oklahoma's deep horizons correlated [pre-Chattanooga formations]: Oil and Gas Jour., vol. 24, no. 45, pp. 60, 110, 112, 114, 116, map (oppp. 17), April 1, 1926.

2803. Oil and gas in Oklahoma; subsurface distribution and correlation of the pre-Chattanoga ("Wilcox" sand) series of northeastern Oklahoma: Oklahoma Geol. Survey, Bull. no. 40-B, 23 pp., 2 pls. (incl. map), June, 1926.

White, Walter N. See Deeds, 629, 630.

Whitlock, Herbert Percy.

2804. The story of the minerals: Am. Mus. Nat. Hist., Handbook series no. 12, 144 pp., illus., New York, 1925.

2805. Memorial of Edmund Otis Hovey: Am. Mineralogist, vol. 10, no. 3, pp. 58-60, portr., March, 1925.

2806. The mimicry of minerals: Natural History (Am. Mus. Nat. Hist., Jour.), vol. 25, no. 2, pp. 156-161, 8 figs., March-April, 1925.

2807. Crystallographic studies of apatite: Am. Mus. Novitates, no. 190, 4 pp., 1 fig., October 7, 1925. Whitson, Andrew Robeson.

2808. (and others). Soil survey of Adams County, Wisconsin: Wisconsin Geol, and Nat. Hist. Survey, Bull, no. 41D (Soil ser. no. 42), 83 pp., 3 figs., 6 pls., map, 1924.

Whittlesey, Derwent S. See Jones, 1327.

Whorton, Chester.

2809. (and Clark, J. M.). Mineola dome of northeast Missouri (abstract): Pan-Am. Geologist, vol. 45, no. 3, p. 250, April, 1926.

Wieland, George Reber.

2810. Dinosaur feed: Science, new ser., vol. 61, pp. 601-603, June 12, 1925.

2811. Triaso-Jurassic plant evolution and climate: Am. Naturalist, vol. 59, pp. 452-474, September-October, 1925; abstract, Pan-Am. Geologist, vol. 44, no. 1, p. 80, August, 1925.

2812. Dinosaur extinction: Am. Naturalist, vol. 59, pp. 557-565, November-December, 1925.

2813. [Report on investigations of cycadeoids]: Carnegie Inst. Washington, Year Book no. 24, pp. 360-362, December, 1925.

2814. The El Consuelo cycadeoids [southern Oaxaca, Mexico]: Bot. Gazette, vol. 81, no. 1, pp. 72-86, 1 fig., March, 1926.

2815. [Research on cycadeoids]: Carnegie Inst. Washington, Year Book no. 25, 1925-6, pp. 407-408, December, 1926.

Wilder, Frank Alonzo.

2816. Gypsum and the gypsum industry: Min. Congress Jour., vol. 12, no. 3, pp. 156, 173, March, 1926.

Wilkes, W. N.

2817. Minerals of Arkansas: Arkansas, Bur. Mines, Manufactures, and Agriculture, 127 pp., illus., 1925.

Willard, Bradford. See also Miller, 1789.

2818. Mud cracks forming over water [Badlands, South Dakota]: Jour. Geology, vol. 33, no. 3, pp. 286-287, 1 fig., April-May, 1925.

2819. A six-rayed Devonaster eucharis (Hall): Jour. Geology, vol. 34, no. 1, pp. 85-87, 1 fig., January-February, 1926.

Willey, A. colesti sanate estimine a no notineatizate omit elenton ed T. acza

2820. Origin of land vertebrates (abstract): Pan-Am. Geologist, vol. 43, no. 3, pp. 233-234, April, 1925.

Williams, Charles F.

2821. Ore deposition in the Tri-State district: Eng. and Min. Jour.-Press, vol. 121, no. 22, p. 893, May 29, 1926.

Williams, George O.

2822. Radium-bearing silts of southeastern Utah: Eng. and Min. Jour., vol. 119, no. 5, pp. 201-202, January 31, 1925.

Williams, J. S. See also Branson, 277.

2823. Louisiana limestone of northeastern Missouri (abstract): Pan-Am. Geologist, vol. 45, no. 3, p. 252, April, 1926.

Williams, T. B.

2824. Identification of coals: Econ. Geology, vol. 21, no. 4, pp. 364-374, 7 figs., June-July, 1926.

Williamson, E. D. See Adams, 8.

Willis, Bailey. See also Bowie, 249.

2825. Memorial of Raphael Pumpelly: Geol. Soc. America, Bull., vol. 36, no. 1, pp. 45-84, portr., March 30, 1925.

2826. Rocky Mountain structure: Jour. Geology, vol. 33, no. 3, pp. 272-277, 1 fig., April-May, 1925.

2827. The Santa Barbara earthquake: Science, new ser., vol. 62, p. x, July 10, 1925.

2828. A study of the Santa Barbara earthquake of June 29, 1925: Seismological Soc. America, Bull., vol. 15, no. 4, pp. 255–278, 1 fig., 2 pls., December, 1925.

2829. Essays on earthquakes: Seismological Soc. America, Bull., vol. 16, no. 1, pp. 27-40, March, 1926.

2830. The Californian orogenic period (abstract): Science, new ser., vol. 63, p. 484, May 7, 1926.

2831. The work of the Seismological Society of America (abstract): Seismological Soc. America, Bull., vol. 16, no. 2, pp. 150–153, June, 1926.

Willis, Robin.

2832. Topography of active faulting in California (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, pp. 143-144, March 30, 1925.

2833. Physiography of the California coast ranges: Geol. Soc. America, Bull., vol. 36, no. 4, pp. 641–678, 23 figs., December, 1925; abstract, no. 1, p. 143, March 30, 1925; Pan-Am. Geologist, vol. 43, no. 2, p. 146, March, 1925.

Williston, Samuel Wendell.

2834. The osteology of the reptile; arranged and edited by William King Gregory. 300 pp., 191 figs., Cambridge, Harvard University Press, 1925.

Willson, Fred F.

2835. The Montana earthquake of June 27, 1925; damage in Gallatin County: Seismological Soc. America, Bull., vol. 16, no. 3, pp. 165–169, 6 pls., September, 1926.

Wilmarth, M. Grace.

2836. The geologic time classification of the United States Geological Survey compared with other classifications, accompanied by the original definitions of era, period, and epoch terms: U. S. Geol. Survey, Bull. 769, 138 pp., 1925.

Wilson, Alice E. how part a straight and all and and insulations and 1989.

2837. An upper Ordovician fauna from the Rocky Mountains, British Columbia: Canada, Geol. Survey, Bull. no. 44, pp. 1-34, 2 figs., 8 pls., 1926.

Wilson, Benjamin H.

2838. Physiographic evolution of Lake Cooper (abstract); Pan-Am. Geologist, vol. 46, no. 5, p. 403, December, 1926.

Wilson, E. D. See Lausen, 1546.

Wilson, Ford E. See Thiessen, 2522.

Wilson, John H.

2839. Lithologic character of shale as an index of metamorphism: Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 6, pp. 625-633, June, 1926. Wilson, Morley Evans.

2840. A discovery of copper-bearing minerals in Petite Nation Seigniory, Papineau County, Quebec: Quebec, Dept. Colonization . . ., Report on Mining Operations . . . 1924, pp. 39-42, 1925.

2841. The Grenville pre-Cambrian subprovince: Jour. Geology, vol. 33, no. 4, pp. 389-407, 3 figs., May-June, 1925; abstract, British Assoc. Adv. Sci., Rept. 92d Meeting, pp. 388-389, 1925.

2842. Talc deposits of Canada: Canada, Geol. Survey, Econ. Geology ser., no. 2, 149 pp., 19 figs., 14 pls., 1926.

Wilson, Philip D.

2843. Methods of mine sampling, recording underground geological data and estimation of ore reserves (committee report): Am. Min. Congress, 27th Ann. Convention, Rept. of Proc., pp. 332-351, 1925; Arizona Min. Jour., vol. 8, no. 11, pp. 11-13, 25-26, November 1, 1924.

Wilson, Roy Arthur.

2844. Oil and gas possibilities in northeastern Meade County: South Dakota Geol. and Nat. Hist. Survey, Circular 23, 14 pp., 3 figs., April, 1925.

2845. The Ragged Butte structure [in southwestern Dewey County, South Dakota]: South Dakota Geol, and Nat. Hist. Survey, Circular 24, 7 pp., 2 figs., 1 pl., April, 1925. Winchell, Alexander Newton,

2846. Studies in the mica group: Am. Jour. Sci., 5th ser., vol. 9, pp. 309-327, 415-430, 5 figs., April, 1925; abstract, Am. Mineralogist, vol. 10, no. 3, pp. 52-54, March, 1925.

2847. A new theory of the composition of the zeolites: Am. Mineralogist, vol. 10, nos. 4-7, pp. 88-97, 112-117, 145-152, 166-174, 6 figs., April-July, 1925.

2848. The FeSiOs-CaSiOs-MgSiOs-NaFeSisOs system of monoclinic amphiboles: Am. Mineralogist, vol. 10, no. 10, pp. 335-341, 2 figs., October, Son from 1925, leds) about Congost of

2849. Studies in the feldspar group: Jour. Geology, vol. 33, no. 7, pp. 714-727, 6 figs., October-November, 1925.

2850. A new kind of metamorphism and its application to the theory of ore deposits: Econ. Geology, vol. 20, no. 7, pp. 642-645, November, 1925.

2851. Chlorite as a polycomponent system: Am. Jour. Sci., 5th ser., vol. 11, pp. 283-300, 4 figs., April, 1926.

2852. Doubtful mineral species as illustrated by "faroelite": Am. Mineralogist, vol. 11, no. 4, pp. 82-89, April, 1926.

2853. (and Emmons, R. C.). Some methods for determining refractive indices: Am. Mineralogist, vol. 11, no. 5, pp. 115-118, 2 figs., May,

2854. The chemical constitution of the tetrahedrite-tennantite system: Am. Mineralogist, vol. 11, no. 7, pp. 181-185, July, 1926.

2855. Relations between properties and composition in the amblygonitemontebrasite series: Am. Mineralogist, vol. 11, no. 9, pp. 246-249, a fig., September, 1926.

Winton, Will McClain. 203 on dell motoridan W. tenl of gorne

2856. The geology of Denton County: Texas, Univ., Bull., no. 2544, 86 pp. 8 figs., 21 pls., map, November 22, 1925.

Withers, Thomas Henry.

2857. A new cirripede from the Niobrara Cretaceous of Kansas: Ann. and Mag. Nat. Hist., 9th ser., vol. 17, pp. 7-11, 1 fig., January, 1926.

2858. Decapod crustaceans (Callianassa) from the Scotland beds of Barbados: Geol. Mag., vol. 63, pp. 104-108, 1 pl., March, 1926.

2859. Scalpellum sanchezi, sp. n., a cirripede from the lower Miocene of Cuba: Ann. and Mag. Nat. Hist., 9th ser., vol. 18, pp. 616–621, 1 fig., 1 pl., December, 1926.

Wittich, Ernesto.

2860. (and Kratzert, T.). Contribuciones à la mineralogía mexicana; Bolminero, t. 15, no. 4, pp. 475–479, April, 1923.

2861. Skizze der Geologie und der Minerallagerstätten von Mexiko: Freiberger geol. Gesellschaft, X. Bericht, pp. 13–18, April, 1925 [not seen]; abstract, Geol. Zentralblatt, Bd. 32, no. 7, pp. 327–328, October 15, 1925.

2862. Los depósitos de Tecal (ónix-mármol) y las salinas de la región de Chila y Tulcingo, Estado de Puebla: Soc. cient. "Antonio Alzate," Mem. y rev., t. 45, nos. 1-6, pp. 115-128, 1926.

Wolf, Albert G.

2863. Big Hill salt dome, Matagorda County, Texas: Am. Assoc. Petroleum Geologists, Bull., vol. 9, no. 4, pp. 711-737, 3 figs., July, 1925; Geology of salt dome oil fields, pp. 691-717, 3 figs., 1926.

2864. Hauerite in a salt-dome cap rock [Matagorda County, Texas]; Am. Assoc, Petroleum Geologists, Bull., vol. 10, no. 5, pp. 531-532, 1 fig., May, 1926.

Wood, Horace Elmer, II. and the mother property of the green were A. TNSS

2865. The position of the "sparassodonts"; with notes on the relationships and history of the Marsupialia: Am. Mus. Nat. Hist., Bull., vol. 51, pp. 77-101, 57 figs., 2 tables, September 19, 1924.

2866. (and Mannhardt, L. Alfred). Oligocene section in Battle Creek Canyon, Washington County, South Dakota (abstract): Geol. Soc. America, Bull., vol. 36, no. 1, pp. 222–223, March 30, 1925.

2867. Hyracodon petersoni, a new cursorial rhinoceros from the lower Oligocene: Carnegie Mus., Annals, vol. 16, no. 2, pp. 315-318, 1 fig., 1 pl., March, 1926.

2868. Some early Tertiary rhinoceroses and hyracodonts (abstract): Geol. Soc. America, Bull., vol. 37, no. 1, pp. 238-239, March 30, 1926.

Wood, Harry O. See Anderson, 51.

Woodford, Alfred Oswald.

2869. Methods for heavy mineral investigations: Econ. Geology, vol. 20, no. 1, pp. 103-104, January-February, 1925.

2870. The San Onofre breccia; its nature and origin; California, Univ., Dept. Geol. Sciences, Bull., vol. 15, no. 7, pp. 159–280, 11 figs., 13 pls. (incl. maps), May 20, 1925.

Woodring, Wendell Phillips.

2871. Miocene mollusks from Bowden, Jamaica; pelecypods and scaphopods: Carnegie Inst. Washington, Pub. no. 366, 222 pp., 28 pls., May, 1925.

2872. Quaternary reef caps of Republic of Haiti (abstract): Pan-Am. Geologist, vol. 43, no. 5, pp. 376-377, June, 1925.

2873. Area patricia Sowerby, a Miocene fossil from the Dominican Republic: Science, new ser., vol. 62, pp. 518-519, December 4, 1925.

Woodring, Wendell Phillips-Continued.

2874. Miocene climate of tropical America (abstract): Washington Acad. Sci., Jour., vol. 16, no. 3, p. 77, February 4, 1926.

2875. Pliocene Viviparus-like opercula from California: Nautilus, vol. 39, no. 4, pp. 109–111, April, 1926.

2876. Fossil Viviparus-like calcareous opercula: Nautilus, vol. 40, no. 1, pp. 12–14, July, 1926.

2877. How fossils got into the rocks; Sci. Monthly, vol. 23, no. 4, pp. 337–345, 6 figs., October, 1926.

2878. American Tertiary mollusks of the genus Clementia: U. S. Geol. Survey, Prof. Paper 147, pp. 25–42, 1 fig., 4 pls., November 22, 1926.

Woodward, Arthur Smith.

2879. Dr. John M. Clarke: Nature, vol. 116, p. 368, September 5, 1925.

Workman, L. E.

2880. The geological columnar section at Monmouth, Illinois, as revealed by the new deep wells: Illinois State Acad. Sci., Trans., vol. 19, pp 300–305, 1926.

Wright, Douglas G. H. and a collaboration bearing to the control of the control o

2881. The Red Lake gold area [District of Patricia, Ontario]: Eng. and Min. Jour., vol. 122, no. 1, pp. 15-20, 1 fig. (map), July 3, 1926.

Wright, Frank James.

2882. The physiography of the upper James River basin in Virginia: Virginia Geol. Survey, Bull. no. 11, 67 pp., 7 figs., 13 pls., 1925.

Wright, Frederick Eugene. See also Bowie, 249.

2883. Gravity and underground lava (abstract with discussion): Washington Acad. Sci., Jour., vol. 15, no. 18, p. 421, November 4, 1925; Bull. volcanologique, 2° ann., nos. 5–6, pp. 332–333, 1925.

2884. Memorial of Robert Simpson Woodward: Geol. Soc. America, Bull., vol. 37, no. 1, pp. 115-134, 1 pl. (portr.), March 30, 1926.

2885. (and Allen, E. T.). Curtisite, a new organic mineral from Skaggs Springs, Sonoma County, California (abstract): Am. Mineralogist, vol. 11, no. 3, p. 67, March, 1926.

Wright, John Frank.

2886. The central Manitoba gold field; some geological notes on the east central Manitoba (Rice Lake) gold area: Canadian Min. Jour., vol. 46, no. 4, pp. 91–95, 5 figs. (incl. map), January 23, 1925.

2887. Oiseau and Maskwa copper and copper-nickel deposits, southeastern Manitoba: Canadian Inst. Min. and Met., Bull., no. 155, pp. 220–231, 1 fig. (map), March, 1925; Trans., vol. 28, pp. 161–173, 1 fig. (map) [1926].

2888. Geology and mineral deposits of the east central Manitoba mining district (with discussion): Canadian Inst. Min. and Met., Bull., no. 164, pp. 1146-1164, 9 figs., December, 1925; Trans., vol. 28, pp. 311-329, 9 figs. [1926].

2889. Geology and mineral deposits of Oiseau River map area, Manitoba:
Canada, Geol. Survey, Summ. Rept., 1924, pt. B, pp. 51–104, 1
fig., 4 pls., 2 maps, 1926.

2890. Oxford and Knee lakes area, northern Manitoba: Canada, Geol. Survey, Summ. Rept., 1925, pt. B, pp. 16–26, map, 1926.

Wright, L. B.

2891. Porphyries of the Porcupine area [Ontario]: Eng. and Min. Jour.-Press, vol. 119, no. 11, pp. 446-447, March 14, 1925.

2892. The relation of the Tertiary rhyolites to mineralization in the Homestake mine; Black Hills Engineer, vol. 14, no. 3, pp. 163-166, 1 fig., May, 1926.

Wyckoff, Dorothy.

2893. Maps without culture; a new aid in the teaching of physiography:
Jour. Geography, vol. 25, no. 8, pp. 307-309, November, 1926.

Wyckoff, Ralph Walter Graystone. See Bowen, 239.

Yates, Arthur B.

2894. The occurrence of quartz in the Homestake mine [Lead, South Da-kota]: Black Hills Engineer, vol. 14, no. 3, pp. 167-171, 2 figs., May, 1926.

Young, A. C. See Rogers, 2143.

Young, Clinton Mason.

2895. Kansas coal; occurrence and production: Kansas, Univ., Bull., vol. 26, no. 5, Eng. Bull. no. 13, pp. 13-123, 29 figs., March 1, 1925.

Young, George Albert.

2896. Geology and economic minerals of Canada: Canada, Geol. Survey.
Econ. Geology ser., no. 1, 187, 57 pp., 1 fig., 38 pls., 2 maps, 1926.
[Pub. no. 2065.]

2897. (and Uglow, W. L.). The iron ores of Canada; Volume 1, British Columbia and Yukon: Canada, Geol. Survey, Econ. Geology ser., no. 3, 253 pp., 44 figs., 1926.

Young, Jacob W.

2898. On the inorganic origin of the hydrocarbons: Canadian Inst. Min. and Met., Bull., no. 162, pp. 952-966, October, 1925.

2899. Angular inclusions in ore deposits (discussion): Econ. Geology, vol. 21, no. 4, pp. 402-403, June-July, 1926.

Zapffe, Carl.

2900. Manganiferous iron ores of Cuyuna district, Minnesota: Am. Inst. Minand Met. Eng., Trans., vol. 71, pp. 372-385, 1925 (with discussion); also [preprint], no. 1390, 1924; abstract, Mining and Metallurgy, vol. 6, no. 227, pp. 573-574, November, 1925.

2901. Stratigraphy and correlation of the Cuyuna iron ore district, Minnesota (with discussion by Hugh M. Roberts): Lake Superior Min. Inst., Proc. 24th Ann. Meeting, vol. 24, pp. 89-105, pl. (map), 1925.

2902. Further data on the correlation of the Cuyuna iron-bearing member [Minnesota]: Lake Superior Min. Inst., Proc., vol. 25, pp. 219-227, 2 figs., 1926.

Anonymous.

2903. Production of petroleum in 1923: Am. Inst. Min. and Met. Eng., no. 1335, 264 pp., April, 1924.

2904. Oil and gas in northeastern Colorado: Oil and Gas Jour., vol. 23, no. 23-A, pp. 46, 110-111, 1 fig., October 30, 1924.

2905. Willet G. Miller: Am. Inst. Min. and Met. Eng., Trans., vol. 71, pp-1376-1377, 1925.

2906. Investigators gradually unfold origin and present nature of coal: Coal Age, vol. 27, no. 9, pp. 319-323, 2 figs., February 26, 1925.

Anonymous-Continued.

2907. What makes coal coke?: Coal Age, vol. 27, no. 10, pp. 364-366, 1 fig., March 5, 1925.

2908. Production of petroleum in 1924: Am. Inst. Min. and Met. Eng., no. 1447, 247 pp., April, 1925.

2909. The cause of volcanoes: Science, new ser., vol. 61, pp. x, xii, May 15, 1925.

2910. Sierra Nevada earthquakes of March 20, 1925: Seismological Soc. America, Bull., vol. 15, no. 2, pp. 140-142, June, 1925.

2911. The causes of earthquakes: Science, new ser., vol. 62, p. xii, July 10. 1925.

2912. Jay Backus Woodworth: Science, new ser., vol. 62, p. 150, August 14, 1925.

2913. Washington meeting of American Association for Advancement of Science: Pan-Am. Geologist, vol. 43, no. 5, pp. 363-380, June, vol. 44, no. 1, pp. 69-80, August, 1925.

2914. Professor Jay Backus Woodworth: Am. Jour. Sci., 5th ser., vol. 10, pp. 381-382, October, 1925.

2915. Geological conference in western Texas: Science, new ser., vol. 62, p. 413, November 6, 1925.

2916. Dinosaurs leave footprints in Utah coal mines: Coal Age, vol. 28, no. 22, 2 figs., November 26, 1925.

2917. In memoriam, John Mason Clarke, 1857-1925: New York State Mus. Bull., no. 267, pp. 7-11, 1926.

2918. The South Dakota badlands: Black Hills Engineer, vol. 14, no. 2, pp. 65-76, 13 figs., March, 1926.

2919. Kansas City meeting [of Section E] of American Association [for the Advancement of Science]: Pan-Am. Geologist, vol. 45, no. 2, pp. 170-176, no. 3, pp. 247-256, March and April, 1926.

2920. Petroleum development and technology in 1925: Am. Inst. Min. and Met. Eng., no. 1570, 784 pp., April, 1926.

2921. The first meeting of the eastern section of the Seismological Society of America: Science, new ser., vol. 63, p. 449, April 30, 1926.

2922. Eleventh annual meeting of the American Association of Petroleum Geologists, Dallas, Texas, March 25-27, 1926; Am. Assoc. Petroleum Geologists, Bull., vol. 10, no. 5, pp. 538-549, May, 1926.

2923. Geologic map of a portion of western Texas and southeastern New Mexico: Oil and Gas Jour., vol. 24, no. 52, p. 182, May 20, 1926.

2924. Eastern section of the Seismological Society of America: Seismological Soc. America, Bull., vol. 16, no. 2, pp. 150-159, June, 1926.

2925. The St. Lawrence earthquake: Canadian Min. Jour., vol. 47, no. 33, pp. 801–802, August 13, 1926.

2926. Potash in Texas: Science, new ser., vol. 64, pp. x, xii, December 10, 1926.

2927. James Furman Kemp: Mining and Metallurgy, vol. 7, no. 239, p. 546, portr., December, 1926.

- Anonymous-Continued.
- 2007, What makes coul cohert Court Not vot. 27, no. 10, pp. 361-300, U.Sa. March 5, 1903.
- 2008, Freduction of perceious in 1991; Aus. Tast. Min. and Mar. Box. no. 1447, 247 no. April 1925.
- 2909. The cause of releases: Science new ser, well it, pp. 2, 34, May 15, 1925.
- 2810 Sierra Negada, entitiquation of March 20, 1925; Schmological; Soc.
- 2011. The causes of earthquakes, Science, new ser, vol. 62, p. xii, July 10,
- 2912. Jay Backus Woodworth: Science, new sar, vol. 62, p:1150, Augustalit.
- 2013, Washington meeting of American Association for Advancement of Science: Pan-Ain, Geologist, vol. 43, no. 5, pp. 263-286, June
- 2014. Professor Jay Bactus Woodworth: Am. Jour. Sci., 5th ser, vol. 10, pp.
- 2815. Geological conference in western Texasi Science, new serie vol. 62. p.
- 2816. Dinosawa leave footprints in Utah can't mines; Coal Age, vol. 28, no. 22,
- 2217, In memorian, John Mason Clarke, 1857-1923; New York State Mus-
- 2018. The South Delone builted Hills Postmon, vol. 14, no. 2, pp.
- 2920. Terroloum development and termology in 1645. Am Inc. Min. and Mes. Eug., no. 1570, 784 pg., April, 1926.
- 2021. The first marking of the pastern section of the Selemological Society of
- 2922. Eleventh annual meeting of the American Association of Potrobeam techniques Unitary Toxic, March 25-27, 1820; Am. Assoc. Tetro-
- 2823. Geologic map by a portion of western Terms and soulbenstern New
- 2924 Tractors served of the Scientify of America Science State
- 2025. The St. Lawrence chrisquake: Camadian Mill. Jour., vol. 47, pp. 23, pp. 801-802. Americk 18, 1026.
- 2020. Potash in Texas; Selecte, new ser, vol. 64, pp. x; xil, Detember 10, 1920, 2027. James Formen Kemp; Mining and Metallurgy, vol. 7, no. 250, p. 546.
- 2000 Production of personal in 1723 Am. Sept. 10s. and Mer. Eng. a 1030, 204 pp., April, 2024.
- 2304 Oll, and gas in nurthern sectors of the spill and that from, vol. 25, its
- 1903 Willet G. Miller, Ass. Teat. Min. part Met. Pair, Griss and Sh. pa 1870-1877, 1923.
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American Association for the Advancement of Science, Kansas City meeting, December, 1925: Mansfield, 1691; Anon., 3119.

Washington meeting, 1924-5: Moore, 1829; Anon., 3113.

American Association of Petroleum Geologists, Wichita meeting, 1925: Moore, 1841.

Denver meeting, 1926: Hull, 1206. 11th annual meeting, Dallas, Texas, 1926: Anon., 3122.

Pacific section, San Francisco, 1925: Morse, 1849.

American Association of State Geologists, meeting in October in eastern Pennsylvania: Leighton, 1562.

Geological Society of America, Ithaca meeting, 1924: Berkey, 180.

New Haven meeting, 1925: Berkey, 181; Heald, 1062.

Cordilleran section, Stanford University, May, 1924: Buwalda, 363; Berkeley, February, 1925; Buwalda, 364; Stanford University, 1926: Heald, 1064.

Mineralogical Society of America, fifth annual meeting, Ithaca, New York: Van Horn, 2635, 2636.

New Haven, December, 1925: Van Horn, 2639, 2640.

Paleontological Society, Ithaca, 1924: Bassler, 137.

New Haven, 1925: Bassler, 141.

Seismological Society of America, eastern section: Anon., 3124.

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Bibliography.

Anguilla: Earle, 697.

Arthrodires: Stensiö, 2446.

Bailey, L. W., writings: Bailey, 78.

Becker, G. F., writings: (Evans), Merrill, 1773. Branner, J. C., writings: Penrose, 1989,

1990. Brooks, A. H., writings: Smith, 2372.

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Colorado, Golden area: Johnson, 1291. maps: Johnson, 1293. northeastern: Johnson, 1288.

Bibliography-Continued.

Colorado, northwestern : Johnson, 1926. southeastern: Johnson, 1292.

Conodont and annelid jaw literature: Roundy, 2177.

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Crustacea, Paleozoic: Vogdes, 2682.

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Maryland, Kent County: Miller, 1786. Queen Annes County: Miller, 1787. Talbot County: Miller, 1788.

Mid-Continent oil fields: Merritt, 1778. Miller, W. G., writings: Tyrrell, 2612. Newfoundland, southeastern, brian-Ordovician: Howell, 1188.

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Springer, Frank, writings: Springer, 2403.

Stevenson, J. J., writings: White, 2799. Tennessee, Ducktown district: Emmons, 743.

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Woodward, R. S., writings: Wright, 2884.

. Woodworth, J. B., writings: Keith, 1342.

Big Hill salt dome, Jefferson County, Texas: Henley, 1087.

Big Hill salt dome, Matagorda County, Texas: Wolf, 2863.

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Agassiz, Louis: Keyes, 1434. Bailey, L. W.: Bailey, 78.

Becker, G. F.: Merrill, 1773.

Branner, J. C.: Penrose, 1989, 1990. Brooks, A. H.: Keyes, 1416; Smith. 2354, 2355; Smith, 2368, 2372. Burrows, A. G.: Bateman, 148.

Clarke, J. M.: Keyes, 1424; Schuchert, 2265, 2266, 2268; Walcott, 2695; Woodward, 2879; Anon., 2917.

Chamberlin, T. S.: Kemp, 1355. Crosby, C. O.: Johnson, 1286.

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McInnes, William: Alcock, 19; Malcolm, 1683.

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Morgan, G. B.: Moore, 1842.

Nicollet, J. N.: Keyes, 1423.

Norton, W. H.: Keyes, 1436.

Peck, F. B.: Fretz, 843; Shimer, 2318. Pumpelly, Raphael: Willis, 2825.

Rogers, H. D.: Keyes, 1441.

Shaler, N. S.: Lane, 1534.

Springer, Frank: Springer, 2403.

Stevenson, J. J.: White, 2799.

Uglow, W. L.: Q., 2037.

Van Ingen, Gilbert: Howell, 1186. Watson, T. L.: Giles, 894; Keyes, 1412;

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Woodward, R. S.: Wright, 2884. Woodworth, J. B.; Daly, 585, 587;

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Geology: Cleland, 457; Pirsson, 2006. Geology applied to mining: Spurr, 2413.

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GEOLOGIC FORMATIONS DESCRIBED

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Ada shale, Mississippian, West Virginia: Reger, 2089.

Addington sandstone, Pennsylvanian, Virginia: Giles, 893.

Adelphian till, Pleistocene, Iowa: Keyes, 1461.

Albertian series, pre-Cambrian, Montana and Alberta: Keyes, 1432, 1456.

Alden limestone, Mississippian, Iowa: Van Tuyl, 2645.

Alderson limestone, Mississippian, West Virginia: Reger, 2089.

Alkali formation, Recent, Oregon: Smith, 2380.

Allison barren member, Cretaceous, New Mexico: Sears, 2284.

Alma formation, Carboniferous, Nova Scotia: Bell, 174,

Almond formation, Cretaceous, Wyoming: Sears, 2283.

Alta Mira limestone, Jurassic (?), Mexico: Anderson, 50.

Alvord formation, Miocene, Oregon: Smith, 2380.

Amity shale, Devonian, Pennsylvania and Ohio: Chadwick, 419.

Anderson formation, Pennsylvanian, Tennessee: Glenn, 917.

Anderson phyllite, pre-Cambrian, Wyoming: Blackwelder, 232.

Annville limestone, Cambrian or Ordovician, Pennsylvania: Miller, 1784.

Antler formation, Mississippian, British Columbia: Johnston and Uglow, 1301.

Ashawan till, Pleistocene, Iowa: Keyes,

Ashuwan (Wisconsin) glaciation, Quaternary: Keyes, 1456.

Assiniboian series, Cretaceous, Montana: Keyes, 1456.

Atolia quartz monzonite, Jurassic (?), California: Hulin, 1202.

Avis limestone, Mississippian, West Virginia: Reger, 2089.

Avis sandstone, Mississippian, West Virginia: Reger, 2089.

Avis (Lower) shale, Mississippian, West Virginia: Reger, 2089.

Avis (Upper) shale, Mississippian, West Virginia: Reger, 2089.

Bad Heart member, Cretaceous, Alberta: McLearn, 1676.

Balmville limestone, Ordovician, New York: Holzwasser, 1162.

Bangor beds, Ordovician, Pennsylvania: Behre, 165.

Barberie andesites, Devonian, New Brunswick: Howard, 1181.

Bartlett barren member, Cretaceous, New Mexico: Sears, 2284.

Batchawana series, pre-Cambrian, Ontario: Moore, 1835.

Bay de Noc member, Ordovician, Michigan: Hussey, 1221.

Bayfield sandstone, Algonkian, Indiana: Logan, 1613, 1614.

Beady formation, Cretaceous (?), British Columbia: Kerr, 1403.

Belcher (Lower) sandstone, Mississippian, West Virginia: Reger, 2089.

Belcher (Lower) shale, Mississippian, West Virginia: Reger, 2089.

Belcher (Upper) sandstone, Mississippian, West Virginia: Reger, 2089. Bellingham beds, Tertiary, Washington:

Hertlein and Crickmay, 1095. Bell Island series, Ordovician, Newfound-

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West Virginia: Reger, 2089.
Bellepoint (Middle) limestone, Mississippian, West Virginia: Reger, 2089.

Bellepoint (Middle) sandstone, Mississippian, West Virginia: Reger, 2089.

Bellepoint (Middle) shale, Mississippian, West Virginia: Reger, 2089.

Bellepoint (Upper) sandstone, Mississippian, West Virginia: Reger, 2089.

Bellepoint (Upper) shale, Mississippian, West Virginia: Reger, 2089.

Bent limestone, Mississippian, West Virginia: Reger, 2089.

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Bent (Upper) shale, Mississippian, West Virginia: Reger, 2089.

"Berners formation," Jurassic, Alaska: Martin, 1709. Bertha limestone, Mississippian, West Vir-

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Bibb dolomite, Ozarkian, Alabama: Butts,

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Bitterroot period, pre-Cambrian, Montana: Keyes, 1456.

Black Canyon schist, pre-Cambrian, Colorado: Hunter, 1218.

Blackhawk formation, Cretaceous, Utah: Spieker and Reeside, 23951

Black Mountain basalt, Pliocene or Pleistocene, California: Hulin, 1202.

Black Mountain volcanics, Triassic or Jurassic, California: Hanna, 1021.

Blackstone series, pre-Pennsylvanian, Rhode Island: Martin, 1711.

Blakeley formation, Tertiary, Washington: Hertlein and Crickmay, 1095.

Bouleaux formation, Silurian, Ouebec: Schuchert and Dart, 2267.

Bradshaw limestone, Mississippian, West Virginia: Reger, 2089.

Bradshaw sandstone, Mississippian, West Virginia: Reger, 2089.

Bradshaw shale, Mississippian, West Virginia: Reger, 2089.

Branch Pond gneiss, Maine: Perkins and Smith, 1991.

Bratton sandstone, Mississippian, West Virginla: Reger, 2089.

Bratton shale, Mississippian, West Virginia: Reger, 2089.

Brewer phyllite member, Algonkian (?), Alabama: Butts, 362.

Bridge Creek limestone member, Cretaceous, Kansas: Bass, 135.

Bristow formation, Pennsylvanian, Oklahoma: Fath, 775.

Broad Ford sandstone, Mississippian, West Virginia: Reger, 2089.

Broken Arrow formation, Carboniferous, Oklahoma: Merritt and McDonald, 1778.

Brookhaven terrace, Pliocene, Mississippi: Lowe, 1638.

Bruzer limestone [in error for Brazer limestone], Carboniferous, Montana: Keyes,

Buck Creek formation, Pennsylvanian, Oklahoma: Gould, 947.

Burntside granite gneiss, pre-Cambrian, Minnesota: Grout, 986.

Butting Ram sandstone member, Algonkian (?], Alabama: Butts, 362.

Camulos formation, Pliocene, California: Keyes, 1421.

Canaseraga sandstone, Devonian, New York:

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2014. River beds, Tertiary, Louisiana: Spooner, 2398, 2399.

Canton terrace, Pliocene, Mississippi : Lowe, 1638.

Capistrano formation, Miocene (?), California: Woodford, 3070.

Carlsbad limestone member, Permian, New Mexico: Meinzer et al., 1751.

Eison member, Permian, Oklahoma: Aurin | Carlsbad limestone member, Permian, Texas: Darton and Reeside, 594.

Cassiar batholith, Cretaceous (?), British Columbia: Kerr, 1403.

Chadakoin beds, Devonian, New York: Chadwick, 418.

Chadakoin beds, Devonian, Pennsylvania and Ohio: Chadwick, 419.

Chamberlin's Brook formation, Cambrian, Newfoundland: Howell, 1187.

Chapala beds, Pleistocene (?), Mexico: Palmer, 1947.

Chapin beds, Mississippian, Iowa: Van Tuyl, 2645. Chaquaqua member, Permian (?), Colorado:

Duce, 675.

Cheaha sandstone member, Algonkian (?), Alabama: Butts, 362.

Cherric period, pre-Cambrian, Montana: Keyes, 1456.

Chewacla marble, Algonkian, Alabama: Adams, 5. Chewaucan formation, Pleistocene, Oregon:

Smith, 2380. Chickasha formation, Permian, Oklahoma:

Aurin et al., 76, Gouin, 944,

Christie member, Ordovician, Ontario: Fritz, 848.

Chusa member, Tertiary, Texas: Bai'ey, 79. Clarenville series, Ordovician, Newfoundland: Howell, 1188.

Clayton sandstone, Mississippian, West Virginia: Reger, 2089.

Clayton shale, Mississippian, West Virginia: Reger, 2089.

Clemville formation, Silurian, Quebec: Schuchert and Dart, 2267.

Cloud Chief formation, Permian, Oklahoma: Gould and Lonsdale, 949, 953.

Coahuila silt, California: Hanna, 1015. Coal Creek formation, Pennsylvanian, New

Brusnwick: Dyer, 692. Cobourg limestone, Ordovician, New York:

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Colvin Run limestone, Permian, Pennsylvania: Johnson, 1298.

Coney limestone, Mississippian, West Virginia: Reger, 2089.

Coney shale, Mississippian, West Virginia: Reger, 2089.

Coyote formation, Eocene, Oregon: Smith, 2380.

Coyote Mountain clays, Tertiary, California: Hanna, 1015.

Crestone conglomerate phase, Permian, Colorado: Melton, 1759.

Cristobal formation, Cretaceous, Mexico: Ver Wiebe, 2668.

Croton limestone, Mississippian, Iowa: Van Tuyl, 2645.

Cruse shale, Miocene, Trinidad: Waring, 2727.

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- Curecanti granite, pre-Cambrian, Colorado: Hunter, 1218.
- Custerian series, Jurassic, Black Hills: Keyes, 1413.
- Dalhousie series, Devonian, New Brunswick: Howard, 1181.
- Danforth member, Ordovician, Ontario: Fritz, 848; Parks, 1963.
- Dease series, Paleozoic, British Columbia: Kerr, 1403.
- Dederick shale member, Pennsylvanian, Missouri: Greene and Pond, 968.
- Delmar sand, Eocene, California: Hanna, 1021.
- Devil's Lake sandstone, Ordovician, Indiana: Logan, 1613, 1614.
- Diamond formation, Pleistocene, Oregon: Smith, 2380.
- Dilco coal member, Cretaceous, New Mexico: Sears, 2284.
- Dixon formation, Pennsylvanian, Kentucky: Burroughs, 346.
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- Domengine formation, Eocene, California: Clark, 444.
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- ginia: Reger, 2089.

 Drury shale and sandstone member, Pennsylvanian, Illinois: Lamar, 1520.
- Dubois greenstone, pre-Cambrian, Colorado: Hunter, 1218.
- Duncan sandstones, Permian, Oklahoma: Aurin et al., 76.
- Duskin Creek formation, Pennsylvanian, Tennessee: Nelson, 1885.
- Dutch Creek formation, pre-Cambrian, British Columbia: Walker, 2697, 2698.
- Eagle City beds, Mississippian, Iowa: Van Tuyl, 2645.
- Eastland shale lentil, Pennsylvanian, Tennessee: Butts and Nelson, 360; Nelson, 1885, 1886.
- Edray sandstone, Mississippian, West Virginia: Reger, 2089.
- Elkoan series : Keyes, 1432.
- Elliott Cove series, Cambrian, Newfoundland: Howell, 1188.
- Emery sandstone member, Cretaceous, Utah: Spieker and Reeside, 2395.
- Ericson sandstone, Cretaceous, Wyoming: Sears, 2283.
- Erin shale, Pennsylvanian, Alabama: Butts, 362.
- Erindale member, Ordovician, Ontario: Dyer, 687.
- Estancía basalt, Quaternary, Mexico: Palmer, 1947.
- Fairmont shale member, Permian, Oklahoma: Aurin et al., 76.

- Falls Mills limestone, Mississippian, West Virginia: Reger, 2089.
- Falls Mills sandstone, Mississippian, West Virginia: Reger, 2089.
- Falls Mills shale, Mississippian, West Virginia: Reger, 2089.
- Fant member, Tertiary, Texas: Bailey, 79. Fernian series, Jurassic, Montana: Keyes, 1456.
- Fivemile (Lower) shale, Mississippian, West Virginia: Reger, 2089.
- Fivemile (Upper) shale, Mississippian, West Virginia: Reger, 2089.
- Flagstaff limestone member, Tertiary, Utah: Spieker and Reeside, 2395.
- Fossil Lake formation, Pleistocene, Oregon: Smith, 2380.
- Foxian series, Cretaceous, Montana: Keyes, 1456.
- French slate, pre-Cambrian, Wyoming: Blackwelder, 232.
- Frisco limestone, Devonian, Oklahoma: Reeds, 2080.
- Gallup sandstone member, Cretaceous, New Mexico: Sears, 2284.
- Garber sandstones, Permian, Oklahoma: Aurin et al., 76.
- Garley Canyon sandstone, Cretaceous, Utah: Spieker and Reeside, 2395.
- Gibson coal member, Cretaceous, New Mexico: Sears, 2284.
- Gillies intrusive, Jurassic (?), British Columbia: Swanson, 2482,
- Gizzard formation, Pennsylvanian, Tennessec: Butts and Nelson, 360; Nelson, 1885, 1886.
- Glady Fork sandstone, Mississippian, West Virginia: Reger, 2089,
- Glenray limestone, Mississippian, West Virginia: Reger, 2089.
- Goat Mountain formation, Jurassic, British Columbia: Schofield, 2259.
- Goodwyn sandstone, Mississippian, West Virginia: Reger, 2089,
- Goodwyn (Lower) shale, Mississippian, West Virginia: Reger, 2089.
- Goodwyn (Upper) shale, Mississippian, West Virginia: Reger, 2089.
- Gowanda beds, Devonian, New York: Chadwick, 418.
- Graham limestone, Mississippian, West Virginia: Reger, 2089.
- Graham sandstone, Mississippian, West Virginia: Reger, 2089.
- Graham (Lower) shale, Mississippian, West Virginia: Reger, 2089.
- Graham (Upper) shale, Mississippian, West Virginia: Reger, 2089.
- Grand Lake formation, pre-Pennsylvanian, New Brunswick: Dyer, 692.
- Grassy Knob chert, Devonian, Illinois Bassett, 136; Savage, 2235, 2236.
- Graves sand, Cretaceous, Arkansas: Schneider, 2256.

Gravoisan glacial epoch, Iowa: Keyes,

Gravoisan till, Pleistocene, Iowa: Keyes, 1461.

Greece Ranch horizon, Eocene, California: Clark, 437.

Greenberry formation, Mississippian, British Columbia: Johnston and Uglow, 1301.

Greenville shale, Mississippian, West Virginia: Reger, 2089.

Guadalupe group, Permian, Texas and New Mexico: Darton and Reeside, 594.

Guantánamo shale, Oligocene or Miocene, Cuba: Darton, 593.

Guaracara (Tamana) limestone, Miocene, Trinidad: Waring, 2727.

Guaso limestone, Eocene, Cuba: Darton, 593.

Guyet formation, Mississippian, British Columbia: Johnston and Uglow, 1301.

Hackett sandstone, Mississippian, West Virginia: Reger, 2089.

Hackett shale, Mississippian, West Virginia: Reger, 2089.

Harrowgate limestone, Devonian, British Columbia: Shepard, 2314.

Hartland shale member, Cretaceous, Kansas: Bass, 135.

Hayfield shale, Devonian, Pennsylvania: Chadwick, 419.

Hayward sandstone member, Permian, Oklahoma: Aurin et al., 76.

Headquarters schist, pre-Cambrian, Wyoming: Blackwelder, 232.

Heart metagraywacke, pre-Cambrian, Wyoming: Blackwelder, 232.

Helenan series, pre-Cambrian, Montana: Keyes, 1456.

Hennessey shale, Permian, Oklahoma: Aurin et al., 76.

Herbert conglomerate, Pennsylvanian, Tennessee: Nelson, 1885, 1886.

Hillsdale limestone, Mississippian, West Virginia: Reger, 2089.

Hollis quartzite, Algonkian, Alabama: Adams, 5. Horsethief formation, pre-Cambrian, Brit-

ish Columbia: Walker, 2697, 2698. Hoxbar member, Pennsylvanian, Oklahoma:

Hoxbar member, Pennsylvanian, Oklahoma Bullard, 338.

Hunt sandstone, Mississippian, West Virginia: Reger, 2089.

Ignek formation, Jurassic (?), Alaska: Martin, 1709.

Imperial formation, Tertiary, California:
Hanna, 1015.

Inch Arran latites, Devonian, New Brunswick: Howard, 1181.

Indian conglomerate, Eccene, California: Nelson, 1881.

Indian Mills sandstone, Mississippian, West Virginia: Reger, 2089.

Indian Mills shale, Mississippian, West Virginia: Reger, 2089.

Indian Point formation, Silurian, Quebec: Schuchert and Dart, 2267.

Ingles conglomerate member, Carboniferous, Virginia: Campbell, 393.

Iowa Falls dolomite, Mississippian, Iowa: Van Tuyl, 2645.

Ischua sandstone, Devonian, New York: Chadwick, 418.

Itascan glacial epoch, Iowa: Keyes, 1444. Itascan till, Pleistocene, Iowa: Keyes, 1461. Jemison chert, Devonian, Alabama: Butts, 362.

Jetmore member, Cretaceous, Kansas: Bass, 135.

Johannesburg gneiss, Archean, California:
Hulin, 1202.
Leliet limestone Silveian Illinois: Savere

Joliet limestone, Silurian, Illinois: Savage, 2237.

Jumbo dolomite member, Algonkian (?), Alabama: Butts, 362.

Juniper Hill formation, Devonian, Iowa: Van Tuyl, 2645.

Kaltag formation, Cretaceous, Alaska: Martin, 1709.

Kamehame basalt, Recent and Pleistocene (?), Hawaii: Stearns, 2439. Kaskapau member, Cretaceous, Alberta:

McLearn, 1676.

Kelligrew Brook formation, Cambrian, New-

foundland: Howell, 1187. Kingak shale, Jurassic, Alaska: Martin,

1709. Klondike member, Devonian, Ohio: West-

gate, 2770.

La Carriere shale, Cretaceous, Trinidad:

Waring, 2727. La Jolla formation, Eocene, California: Clark, 444; Hanna, 1021.

Lanai basalt, Lanai (Hawaiian Islands): Wentworth, 2757.

Latah formation, Miocene, Washington: Pardee and Bryan, 1950, 1951.

Latrania sands, Tertiary, California : Hanna, 1015.

Laventille limestone, pre-Cretaceous, Trinldad: Waring, 2727.

La Vieille formation, Silurian, Quebec: Schuchert and Dart, 2267.

Lea Park formation, Cretaceous, Alberta: Hume, 1212.

Legrand beds, Mississippian, Iowa: Van Tuyl, 2645.

Leonard formation, Permian, Texas: King, 1478.

Lick Creek sandstone, Pennsylvanian, Illinois: Poor, 2012.

Lillydale shale, Mississippian, West Virginia: Reger, 2089.

Lincoln limestone member, Cretaceous, Kansas: Bass, 135.

Lindside sandstone, Mississippian, West Virginia: Reger, 2089.

Liskeard formatica, Ordovician, Canada: Hume, 1207.

- Lismore formation, Carboniferous, Nova Scotia: Bell, 174.
- Little Oak limestone, Ordovician, Alabama: Butts, 362.
- Livengood chert, Mississippian, Alaska: Mertie, 1780.
- Lone Wolf sandstone, Permian, Oklahoma: Patton, 1982.
- Long Pond formation, Cambrian, Newfoundland: Howell, 1187.
- Longs Peak granite, Colorado: Fuller, 851. Longview limestone, Ordovician, Alabama: Butts, 362.
- Lookout schist, pre-Cambrian, Wyoming: Blackwelder, 232.
- Lowell Park member, Ordovician, Illinois: Knappen, 1490.
- Low Gap limestone, Mississippian, West
- Virginia: Reger, 2089. Low Gap sandstone, Mississippian, West
- Virginia: Reger, 2089. Low Gap shale, Mississippian, West Vir-
- ginia: Reger, 2089. Loxley terrace, Pliocene, Mississippi:
- Lowe, 1638.
 Lucien shale member, Permian, Oklahoma:
- Aurin et al., 76.

 Machapoorie formation, Miocene, Trinidad:
- Waring, 2727. McLeod series, Jurassic (?), British Colum-
- bia: Kerr, 1403. Macquereau series, Ordovician (?) or Cambrian (?), Quebec: Schuchert and Dart,
- Magog conglomerate, Ordovician, Quebec
- Dresser, 674.

 Makanda sandstone member, Pennsylvan-
- ian, Illinois: Lamar, 1520.

 Malheur formation, Recent, Oregon: Smith, 2380.
- Mandanan series, Tertiary, Wyoming: Keyes, 1413.
- Keyes, 1413. Manele basalt, Lanai (Hawaiian Islands):
- Wentworth, 2757.

 Maple Green andesites, Devonian, New Brunswick: Howard, 1181.
- Maquay formation, Oligocene or Miocene, Cuba: Darton, 593.
- Marac formation, Eocene, Trinidad: War-
- ing, 2727. Marquette member, Cretaceous, Kansas:
- Twenhofel and Tester, 2605.

 Masukian series, Cretaceous, Montana:

 Keyes, 1456.
- Matura formation, Pliocene, Trinidad: Waring, 2727.
- Mayne Creek beds, Mississippian, Iowa: Van Tuyl, 2645.
- Meadowville member, Ordovician, Ontario;
- Dyer, 687. Meaford formation, Ordovician, Ontario:
- Fritz, 848.

 Medicine Peak metaquartzite, pre-Cambrian,
 Wyoming: Blackwelder, 232.
- Melozi formation, Cretaceous, Alaska: Martin, 1709.

- Middleborough member, Carboniferous, Nova Scotia: Bell, 174.
- Middle River formation, Carboniferous, Nova Scotia: Bell, 173.
- Millers sanstone, Devonian, Pennsylvania: Chadwick, 419.
- Millsville member, Carboniferous, Nova Scotia: Bell, 174.
- Mingan formation, Ordovician, Quebec: Twenhofel, 2607.
- Minnewanka formation, Devonian, Alberta:
- Shimer, 2319.

 Misener sand, Oklahoma: Merritt and Mc-Donald, 1778.
- Moingonan glacial epoch, Iowa: Keyes,
- 1429, 1444. Moingonan till, Pleistocene, Iowa: Keyes,
- 1461, Mono shale, Eocene, California: Nelson,
- 1881, Morrow Creek member, Eocene, Wyoming:
- Bradley, 271.
 Mount Bennett rhyolite, Miocene (?),
- Mount Bennett rhyolite, Miocene (?)
 Idaho: Piper, 2003.
- Mount Forster formation, Devonian (?), British Columbia: Walker, 2697.
- Mount Moriah formation, Eocene, Trinidad: Waring, 2727.
- Mount Nelson formation, pre-Cambrian, British Columbia: Walker, 2697, 2698.
- Mt. Olympus granite, Colorado: Fuller, 851.
- Mud (Lower) sandstone, Mississippian, West Virginia: Reger, 2089.
- Mud (Lower) shale, Mississippian, West Virginia: Reger, 2089.
- Mud (Upper) sandstone, Mississippian, West Virginia: Reger, 2089.
- Mud (Upper) shale, Mississippian, West
- Virginia: Reger, 2089. Narrows chert, Ordovician, West Virginia:
- Reger, 2089.
- Nash marble series, pre-Cambrian, Wyoming: Blackwelder, 232.
- Natural Corral member, Cretaceous, Kansas: Twenhofel and Tester, 2605.
- Nelagoney formation, Pennsylvanian, Oklahoma: Gould, 947.
- Nellie Bly formation, Pennsylvanian, Oklahoma: Gould, 947.
- Nelly Bly formation, Pennsylvanian, Oklahoma; Shannon, 2292.
- Newala limestone, Ordovician, Alabama: Butts, 362.
- Newcastle Creek formation, Pennsylvanian, New Brunswick: Dyer, 692.
- Newfoundland series, Cambrian, Newfoundland: Howell, 1188.
- Newport formation, Pleistocene, Oregon: Smith, 2380.
- Newton sandstone, Pennsylvanian, Tennessee: Nelson, 1885.
- Ninole basalt, Tertiary (?), Hawaii: Stearns, 2439.
- Northeast shale, Devonian, New York: Chadwick, 418.

Novillo beds, Cretaceous (?), Mexico: Heim, 1078.

Nye shale, Oligocene, Oregon: Smith, 2380. Ochelata formation, Pennsylvanian, Oklahoma: Gould, 947.

Odenville limestone, Ordovician, Alabama: Butts, 362.

Ogontz member, Ordovician, Michigan: Hussey, 1221.

Okikeska series, pre-Cambrian, Quebec: Bain, 84.

Ore Hill formation, Cambrian, Pennsylvania: Miller, 1784.

Orito limestone, Cretaceous, Mexico: Anderson, 50.

Paicines formation, Pliocene, California: Kerr and Schenck, 1404.

Palouse formation, Pleistocene, Washington: Treasher, 2580, 2582.

Patton limestone, Mississippian, West Virginia: Reger, 2089.

Patton shale, Mississippian, West Virginia: Reger, 2089.

Payne Branch sandstone, Mississippian, West Virginia: Reger, 2089.

Payne Branch shale, Mississippian, West Virginia: Reger, 2089,

Pen Argyl beds, Ordovician, Pennsylvania: Behre, 165.

Perserverance slate, Triassic, Alaska: Martin, 1709.

Pfeifer shale member, Cretaceous, Kansas; Bass, 135.

Pickaway limestone, Mississippian, West Virginia: Reger, 2089.

Pictou series, Carboniferous, Nova Scotia:
Bell. 174.

Pimienta beds, Jurassic (?), Mexico: Heim, 1078.

Pinckneyville granite, post-Carboniferous, Alabama: Adams, 5.

Pinecate formation, Oligocene, California: Kerr and Schenck, 1404.

Pioneer sandstone, Pennsylvanian, Tennessee: Glenn, 917.

Pipestem shale, Mississippian, West Virginia: Reger, 2089.

Pleasant Valley formation, pre-Cambrian, British Columbia: Johnston and Uglow, 1301.

Pluto (Lower) shale, Mississippian, West Virginia: Reger, 2089.

Plymouth member, Carboniferous, Nova Scotia: Bell, 173.

Point à Pierre grits, Cretaceous, Trinidad: Waring, 2727.

Poonah sands, Miocene, Trinidad: Waring, 2727.

Port Byron limestone, Silurian, Illinois: Savage, 2237.

Possumtrot shale, Mississippian, West Virginia: Reger, 2089.

Potomac marble, Triassic, Pennsylvania: Miller, 1784.

Powderhorn granite group, pre-Cambrian, Colorado: Hunter, 1218.

Price River formation, Cretaceous, Utah: Spieker and Reeside, 2395.

Pride shale, Mississippian, West Virginia: Reger, 2089.

Princes Town (Lower) marl, Miocene, Trinidad: Waring, 2727.

Proscrpine sills and dykes, British Columbia: Johnston and Uglow, 1301.

Pueblo formation, Mesozoic or older, Oregon: Smith, 2380.

Quanchus batholith, Jurassic, British Columbia: Marshall, 1701.

Raines Corner limestone, Mississippian, West Virginia: Reger, 2089.

Raines Corner shale, Mississippian, West Virginia: Reger, 2089.

Rand schist, Archean, California: Hulin, 1202.

Ranger marble, pre-Cambrian, Wyoming: Blackwelder, 232.

Red Canyon member, Permian (?), Colorado: Duce, 675.

Red Mountain andesite, Pilocene, California: Hulin, 1202.

Redstone granite, Connecticut: Martin, 1711.

Restigouche volcanic series, Devonian, New Brunswick: Howard, 1181.

Reynolds limestone, Mississippian, West Virginia: Reger, 2089.

Rich Hill limestone, Pennsylvanian, Missouri: Greene and Pond, 968.

River John series, Carboniferous, Nova Scotia: Bell, 174.

River Portal mica schist, pre-Cambrian, Colorado: Hunter, 1218.

Rockdale drift, Pleistocene, Illinois: Fisher, 806.

Rock Springs formation, Cretaceous, Wyoming: Sears, 2283.

Rocktown channel sandstone member, Cretaceous, Kansas: Rubey and Bass, 2183. Rogersian series: Keyes, 1432.

Romaine formation, Ordovician, Quebec: Twenhofel, 2607.

Rose Cañon shale, Eocene, California: Hanna, 1021.

Rosedale member, Ordovician, Ontario: Fritz, 848.

Rundle formation, Carboniferous, Alberta: Shimer, 2319.

Saegertown shale, Devonian, Pennsylvania and Ohio: Chadwick, 419.

St. Croix (Lower) formation, Oligocene, Trinidad: Waring, 2727.

St. Croix (Upper) formation, Miocene, Trinidad: Waring, 2727.

San Benito gravels, Pleistocene, California: Kerr and Schenck, 1404.

Sand Creek formation, Pennsylvanian, Oklahoma: Gould, 947.

San Juan Bautista formation, Oligocene, California: Kerr and Schenck, 1404. Santa Francisca rhyolite, Mexico: Anderson, 50.

Santa Rosa beds, Devonian, Mexico: Ver Wiebe, 2668,

Santa Susana formation, Eccene, California: Clark, 437, 444.

Sardis terrace, Pliocene, Mississippi : Lowe, 1638.

Sawyer limestone member, Algonkian (?) and Paleozoic, Alabama: Butts, 362.

Saxian series, Cretaceous, Iowa: Keyes, 1421.

Schnabkaib shale member, Triassic, Arizona: Darton, 592.

Seboomook slate, Silurian, Maine: Perkins, 1992.

Seven Rivers gypsiferous member, Permian, New Mexico: Meinzer et al., 1751.

Shumla sandstone, Devonian, New York: Chadwick, 418.

Sierra Blanca limestone, Eocene, California: Nelson, 1881.

Simijovel formation, Tertiary, Mexico: Ver Wiebe, 2668.

Sinks Grove limestone, Mississippian, West Virginia: Reger, 2089.

Slide Mountain series, Mississippian, British Columbia: Johnston and Uglow, 1301.

Soledad member, Tertiary, Texas: Bailey,

Sparta sand, Eccene, Louisiana: Powers, 2014.

Sparta sand, Tertiary, Louisiana: Spooner,

Spray River formation, Triassic, Alberta: Shimer, 2319.

Staniukovich shale, Cretaceous, Alaska: Martin, 1709. Starbird formation, Devonian, British Co-

lumbia: Walker, 2697.

Star Point sandstone, Cretaceous, Utah: Spieker and Reeside, 2395. Stewart andesites, Devonian, New Bruns-

wick: Howard, 1181. Streetsville member, Ordovician, Ontario:

Dyer, 687. Stonington beds, Ordovician, Michigan:

Hussey, 1221. Stony Gap sandstone, Mississippian, West

Virginia: Reger, 2089. Sugar Loaf dacites, Devonian, New Bruns-

wick: Howard, 1181. Sugarloaf metaquartzite, pre-Cambrian,

Wyoming: Blackwelder, 232. Summer formation, Recent, Oregon: Smith,

Sur series, California: Trask, 2579.

Sycamore Creek sandstone, Devonian, Arizona: Lausen and Wilson, 1546.

Sylacauga marble member, Algonkian (?), Alabama: Butts, 362,

Taggard limestone, Mississippian, West Virginia: Reger, 2089.

Taggard (Lower) shale, Mississippian, West Virginia: Reger, 2089.

Taggard (Upper) shale, Mississippian, West Virginia: Reger, 2089.

Talcott shale, Mississippian, West Virginia: Reger, 2089.

Tallery limestone, Mississippian, West Virginia: Reger, 2089.

Tallery sandstone, Mississippian, West Virginia: Reger, 2089.

Tallery (Lower) shale, Mississippian, West Virginia: Reger, 2089.

Tallery (Upper) shale, Mississippian, West Virginia: Reger, 2089.

Tamán beds, Jurassic, Mexico: Heim, 1078. Tarouba shale, Eocene, Trinidad: Waring, 2727.

Tarryall formation, Permo-Carboniferous, Colorado: Mullenburg, 1870.

Tenejapa formation, Tertiary, Mexico: Ver Wiebe, 2668.

Tenestipa limestone, Cretaceous (?), Mexico: Heim, 1078.

Tequepis sandstone, Miocene, California: Nelson, 1881.

Terry limestone, Mississippian, West Virginia: Reger, 2089.

Terry shale, Mississippian, West Virginia: Reger, 2089.

Thane volcanic group, Jurassic, Alaska: Martin, 1709.

Thibert series, Triassic, British Columbia: Kerr, 1403.

Thomas sand, Pennsylvanian, Oklahoma: Clark, 449.

Tizapan basalt, Tertiary, Mexico: Palmer, 1947.

Toby conglomerate, pre-Cambrian, British Columbia: Walker, 2697. Tophet limestone. Mississippian, West Vir-

ginia: Reger, 2089. Tophet sandstone, Mississippian, West Vir-

ginia: Reger, 2089. Tophet (Upper) shale, Mississippian, West

Virginia: Reger, 2089. Tophet (Lower) shale, Mississippian, West Virginia: Reger, 2089.

Torrey sand, Eccene, California: Hanna,

Tower sandstone lentil, Eocene, Wyoming: Bradley, 271.

Towner greenstone, pre-Cambrian, Wyoming: Blackwelder, 232.

Tres Pinos formation, Eccene, California: Kerr and Schenck, 1404.

Triunfo formation, Tertiary, Mexico: Ver Wiebe, 2668.

Trout Creek formation, Miocene, Oregon: Smith, 2380.

Tununkian series, Cretaceous: Keyes, 1421. "Turkey Mountain" sand, Cambro-Ordovician. Oklahoma: White, 2803.

Tuya lavas, Tertiary, British Columbia: Кегт, 1403.

Union limestone, Mississippian, West Virginia: Reger, 2089.

Vassalboro ss., Silurian, Maine: Perkins and Smith, 1991.

Vernal Mesa granite, pre-Cambrian, Colorado: Hunter, 1218.

Veta Pass limestone member, Pennsylvanian, Colorado: Melton, 1759.

Vidrio formation, Permian, Texas: King, 1478.

Vincent member, Ordovician, Ontario: Fritz, 848.

Volusia shale, Devonian, New York: Chadwick, 418.

Wabana series, Ordovician, Newfoundland: Howell, 1188.

Wabi formation, Silurian, Canada: Hume, 1207.

Wagon tire formation, Eocene, Oregon: Smith, 2380.

Walker conglomerate and sandstone, Pennsylvanian, Missouri: Greene and Poud, 968.

Warren Point sandstone lentil, Pennsylvanian, Tennessee: Nelson, 1885.

Wautubbee marls, Tertiary, Mississippi: Lowe, 1638.

Waverly formation, Mississippian, British Columbia: Johnstone and Uglow, 1301.

Wayside sandstone and shale member, Pennsylvanian, Illinois: Lamar, 1520. Wedowee formation, post-Algonkian, Alabama: Adams, 5.

Westfield shale, Devonian, New York: Chadwick, 418.

West Point formation, Silurian, Quebec: Schuchert and Dart, 2267.

Whetstone Gulf formation, Ordovician, New York: Ruedemann, 2186.

Whitwell shale, Pennsylvanian, Tennessee:
Butts and Nelson, 360; Nelson, 1885,
1886.

Wildhorse formation, Pleistocene, Oregon: Smith, 2380.

Windermere series, pre-Cambrian, British Columbia: Walker, 2697, 2698.

Windom member, Cretaceous, Kansas: Twenhofel and Tester, 2605.

Wolfcamp formation, Permian, Texas: Hoots, 1167.

Wolfe City sand, Cretaceous, Texas: Powers, 2014.

Woodcock sandstone, Devonian, Pennsylvania: Chadwick, 419.

Word formation, Permian, Texas: King, 1478.

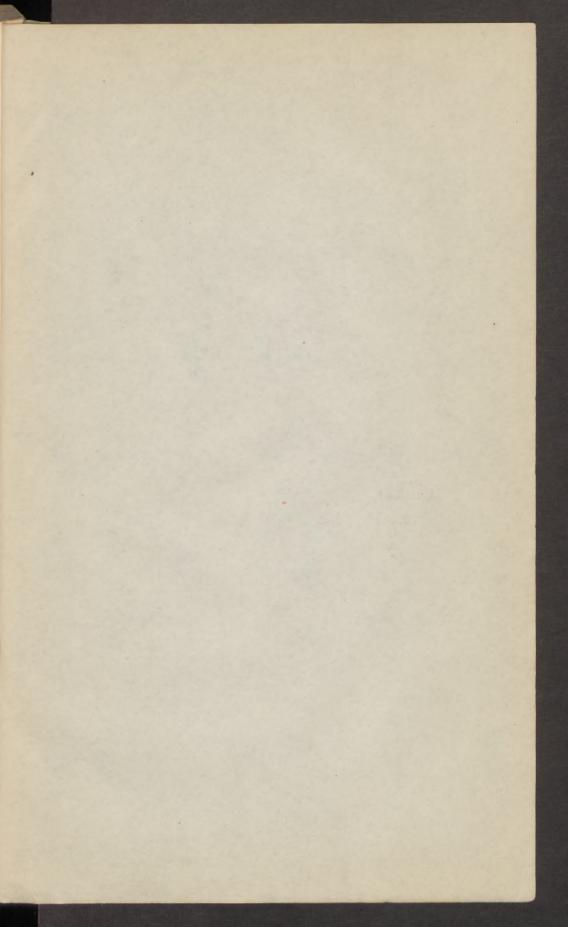
Yellow Leaf quartz schist, Devonian, Alabama: Butts, 362.

Yuha reefs, Tertiary, California: Hanna, 1015.

Zilhlejili formation, Cretaceous, Arizona: Reagan, 2064, 2067.

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